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LEE AND SHEPARD **Publishers Boston**

WATER COLOR PAINTING

A BOOK OF ELEMENTARY INSTRUCTION
FOR
BEGINNERS AND AMATEURS

BY

GRACE BARTON ALLEN

WITH ILLUSTRATIONS BY THE AUTHOR

BOSTON
LEE AND SHEPARD PUBLISHERS
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INTRODUCTION

LORD MACAULAY, beginning the introduction to his great historical masterpiece, employed perhaps the best opening that could be devised, in respect of directness and simplicity, for a book the primary intention of which is to give information and instruction. His first words are, "I purpose to write a history of the English people, from the accession of King James the Second down to a time which is within the memory of men still living"; and he thus at once places before his read-

ers the subject and scope of his work. The author of the present little volume can do no better than follow so illustrious an example, and say, "I purpose to write a book on Water Color Painting, for the use of beginners and amateurs, that shall treat of practice, not of theory, and shall be so clearly expressed and so free from technicalities that he who runs may read, and he who reads may thoroughly understand, and thereby gain as much knowledge of the art as it is possible to derive from an elementary text-book." The average reader will no doubt find in it many items of information with which he is already familiar, and many explanations which he does not require ; but an experience with numerous pupils of all ages has proved that however obvious a fact may seem to be, there is always somebody who is ignorant of it, and that it is better that ten persons should hear an explanation for the second or even third time, than that one person should lack it altogether.

It will be assumed that the reader is a beginner who has never handled color nor brushes, and knows nothing about them. The selection and care of materials, as well as methods of work, will be discussed ; for although the proverb that a poor workman blames his tools, is undoubtedly true, it is equally true that any kind of workman who has improper tools for his purpose, has a right to blame

them, and a teacher who refrained from giving the benefit of experienced knowledge in such matters, would be neglecting an important part of an instructor's duty. Rumor has it that there are some students who always entertain the belief that their teacher's aim is simply to make money, not to conscientiously help them, and that he will yield really useful information only with great reluctance, reserving for his own exclusive use what he knows about pigments, brushes, materials, and peculiarly advantageous methods of work. Such students are known solely by reputation to the author, who has been perhaps unusually fortunate in her relations with her pupils, both in public and private classes ; but if any such read this book, for their enlightenment it would better be explained that a real artist depends for superiority on the skill given by long study and practice alone, and does not rely upon any cheap trick or system, which must be kept secret for fear that the whole world will employ it, and paint as well as he. A good teacher takes pridé in turning out good pupils, and is not deterred by dread of rivalry from helping them to the utmost possible extent.

On the subject of water color painting there is an immense diversity of theory. There are almost as many styles as there are artists, but the methods of work may be roughly divided into two

great classes, — the dry and the wet. In both, wet color is, of course, employed; but in the first, one wash is allowed to dry before the next color is put on the paper, while in the second, the color is kept more or less moist continually. It is impossible to treat all variations of style at length, within the limits of so small a volume as this; so Flower painting will be dealt with according to the dry-paper method, while for Landscapes and Marines a wetter system of work will be explained, Figures, Animals, and Still Life being painted in a combination of the two. As a matter of fact, it makes no difference whether a picture is painted on wet or dry paper, so long as the painter secures the effect he wants, and produces an artistic result. There is no such thing as a cut-and-dried recipe for making a good picture. Good drawing, good coloring, and good composition are essential, but how the pleasing result is attained is quite a secondary matter. It is a great mistake to become so wedded to any special style of working that one is unable to recognize the charm of any other style, and cannot look at all from the standpoint of unbiassed criticism. Artistic bigotry is quite as narrowing in its tendency as bigotry of any other kind, and is equally an obstacle to the perception of broad, underlying truths. There is no possibility of settling on any one theory of

painting as abstractly the best. Every student, after having been well grounded in the general principles of art, must find out the particular way of work with which he, individually, can produce the most satisfactory results; but while pursuing his own chosen line, must yet keep his mind and feeling open to what is good in all lines. It too often happens that a person who has been trained, or who has trained himself, in a particular theory of painting, becomes so intolerant that every other theory seems to him preposterous, and he has no patience with, nor belief in, any aim that differs from his own. This condition of mind is a misfortune to an artist, because it limits his appreciation to his own work and that of his special clique, whereas his perceptive powers should be so sensitive and so widely cultivated that he can say with Keats, "I have loved the principle of beauty in all things."

No two persons see any object in exactly the same way. To one artist, one certain characteristic will appear more picturesque and noteworthy than the rest, while to another, some quite different quality will appeal most forcibly as being the prominent trait. Take for an illustration an aggregation of white flowers, — a branch of dogwood blossoms, or a cluster of lilies. One artist sees in them an opportunity for the exposition of

an elaborate color scheme, in which the tints of the surrounding objects, whether those objects are included in his picture or not, are strongly reflected, to the almost entire exclusion of white. Another artist, using the identical flowers for a model, will feel their snowiness to be their chief charm, and will render it as purely as possible, allowing it to be affected by the environment no more than reason and nature absolutely demand. Each paints the flowers as they look to him, and each may be right. The wrong lies, not in the work of either of them, but in their mutual inability to recognize the fact that there is more than one point of view.

A good art teacher will, therefore, not insist that his pupils shall rigidly follow out his own personal and peculiar theories of painting, thus becoming merely poor imitations of himself, but will strive to give them such thorough general training and technical instruction as will enable them to develop in their own separate, individual ways. He will not correct them when they are simply working a little differently from himself, but only when his practised eye sees that they are transgressing the common law of art and nature. The question of individuality, fortunately, does not arise at the outset of an art student's career; and so while any thoughtful teacher would

refuse to confine his advanced pupils to one particular groove of work, he can, and, indeed, must, give definite and detailed instructions to beginners, which they must accept and act upon with implicit faith, until the time comes when they begin to see for themselves the why and wherefore of what they have been told. However much latent originality there may be in the members of a class, which will ultimately cause each one of them to develop along a different line, they must all begin in the same way; just as the poet, historian, and novelist of a nation, must all learn the same alphabet.

The early stages of art study are undoubtedly the most difficult and discouraging to the pupil, although they are intrinsically the simplest. The untrained eye has not an accurate perception of either form or color, and the untrained hand is tremulous and clumsy in the manipulation of pencil and brush. Work that looks as if it would be easy to do well, is found to demand an unexpected amount of time, attention, and skill, and even when these are given, or at least the first two, it turns out to be done badly. The student has need of a great deal of patience, industry, and courage, to carry him through this initial period, which every teacher will admit to be a trying one. Talent is not mentioned among the necessary

qualifications, because it is not, as a matter of fact, a *sine qua non.* The average person is quite capable of learning to draw and paint fairly well, if he is willing to take enough trouble. Indeed, of two pupils, one talented, but indolent and inattentive, the other without special artistic gifts, but persevering, ambitious, and amenable to instruction, the latter will succeed, while the former, far better endowed for the work by nature, will fail. It is only another illustration of the old fable of the hare and the tortoise.

There is a popular idea that to be born a genius is to be born free from the primal curse of man, — the curse of labor, — and to enter at once, without effort, into a greater estate of skill and knowledge than other men attain by a lifetime of unremitting toil and study. This idea is fallacious. The greatest geniuses have been the greatest thinkers and workers. Sometimes they worked eccentrically, but nevertheless they worked, and they had to acquire, in the beginning, the same elementary principles of art which form a part of the education of every student. Somebody has said that genius is the capacity for taking infinite pains. The difference between the genius and the ordinary man is not that the genius does not have to learn, but that he can learn more easily and quickly, and put what he learns to better account.

Another mistake is that of supposing that talent can educate itself successfully, and requires no other teaching. While it is undoubtedly true that talent and determination together can accomplish much unassisted, the waste of time and force involved is tremendous. Guided by his wits alone, however brilliant they may be, the student is sure to be led more or less astray, and to spend weeks and months in the effort to overcome difficulties which a word of advice from a competent person would solve at once. If every artist had to begin at the foundation, and discover for himself, by dint of repeated experiment and failure, the general principles of art and the requirements of technique, art would seem even longer and life even more brief, relatively, than they do as it is. The well-instructed student is —

"The heir of all the ages, in the foremost files of time,"

for his teacher transmits to him an immediate knowledge of certain fully established laws and rules, and he has only to digest and apply this knowledge; whereas the student beginning work with absolutely no aid, is not even aware that there are such laws and rules, much less what they are, and probably transgresses them all. If he has unusual talent, he by and by perceives that something is wrong, but it is only by arduous efforts

that he learns, without help, where the faults lie, and how they can be remedied or avoided.

If absolutely unassisted study is inadvisable, so also is an entire dependence upon a teacher, to the exclusion of personal industry. There was never a painter who was so great a genius that he could make his pupils artists without effort on their part. A teacher's advice is a guide-board upon the student's road, warning him of dangers and telling him which way to go; not a carriage to carry him. To take lessons and make no application of them, is even less profitable than to work without any lessons at all, for in the latter case the perceptive faculties are sharpened by the effort to observe and to transmit to paper what is seen, if no other advantage is derived. The student is largely responsible for the progress of his own art education, although he is not competent to guide it, and it is according to the use that he makes of advice and opportunities, that he advances.

Among the most fruitful sources of self-improvement is the study of pictures — not merely pictures of world-wide reputation, but those to be seen at the regular exhibitions, and in the windows of dealers. This sort of study is recommended, not because all the pictures thus encountered are admirable, but because where there is nothing praiseworthy, there is usually something to be

shunned, and it is quite as important to know what is to be avoided, as what is to be emulated. By the examination of the work of professional artists, and the effort to find out its good and bad points, the critical faculty is developed, and the student is enabled to see wherein his own work is defective. Naturally he will often be at fault in his early attempts at art criticism, and will approve what is unworthy and condemn what does not deserve condemnation; but in course of time, his judgment will become cultivated, and his eyes will be opened to unsuspected beauties in both art and nature, the appreciation of which will be a lifelong source of pleasure to him.

There is a great difference of opinion among artists on the question of the actual technical instruction to be given to pupils. To many professionals, the idea of systematizing art study for beginners, and giving them absolutely definite rules for their guidance, seems contrary to the spirit of art, which should be untrammelled, and influenced solely by feeling. Nevertheless, it is a fact that there are certain laws, as unalterable as those of the Medes and Persians, which underlie all picture-making of whatever kind; and in the author's opinion, it is far better to at once supply the pupil with an explanation of these laws, making it as clear and exact as the nature of the subject will

permit, than to leave him to blunder into a knowledge of them by himself, on the ground that definite instruction is inartistic. The novice experiences quite difficulty enough in the pursuit of art, if he receives all the help his teacher can possibly give him; and as there are certain things which he must do, and certain others which he must leave undone, it seems entirely consonant with artistic feeling to tell him what they are, as occasion arises, and explain the reasons for and against them. Wherever there is a rule, there is a reason for it, and a student works much better and makes more rapid progress when he fully understands why he is doing what he does. Such understanding no more hampers his individual expression later on, when he has something to express, than instruction in the grammar of a foreign language hampers him in speaking that language. It is simply the means which enables him to express his own thoughts intelligibly.

On the assumption, therefore, that vagueness is not essential to proper art instruction, and that where definite information can be given, it should be made as plain as possible, the earliest steps to be taken in learning water color painting will be considered. Before any question of color arises, the subject of drawing requires attention, and it is a subject with which the amateur too seldom seri-

ously concerns himself, probably because he does not appreciate how important it is. His fancy is fired by the attractions of color, which always strikes the untrained eye long before it grasps the idea of form, and he wants to "learn to paint," without at all realizing that objects have shape as well as color, and that he must be able to render that shape correctly, if he does not want his paintings to be monstrosities. Nothing can compensate for obviously bad drawing in a picture, and it behooves the student to severely criticise himself in this particular, excusing no mistake nor carelessness. A less rigid and accurate training in drawing is needed for Flower, Landscape, and Marine work than for Figure and Animal painting; for although the Flower and Landscape painter requires to have a fair general knowledge of form, nature indulges in many vagaries with trees, flowers, and rocks, and if the artist departs a little from the actual shape, the variation is not evident. With human beings and animals, however, it is a different matter. Nature has provided them with a certain number of limbs and features, and in each variety of creature, the general form and proportions are the same. Any deviation from the rule that nature thus so distinctly lays down, constitutes deformity. To draw the figure of a man, woman, or beast, so that it appears misshapen, is to commit a glaring

fault that no beauty and truth of coloring can conceal nor gloss over. Such an object is a continual vexation to the cultivated eye, and time cannot wither nor custom stale its offensiveness. For this reason, amateurs, who do not wish or are not able to give a great deal of time and serious attention to work, will do most wisely to devote themselves to Flower and Landscape painting. In order to paint figures and animals acceptably, a long and thorough course of preliminary study is necessary, which includes drawing from the cast and from life, and, in the case of animals, from dead subjects. As the course demands much time and labor, it is hardly worth while for anybody to undertake it who does not intend to put his art education to some practical use. For this reason, therefore, as the present volume is intended mainly for the assistance of amateurs, Flower painting, which is most widely successful, and therefore popular, with them, will be treated of at greater length than other classes of work, and Landscape and Marine painting will come next in the allotment of space. Still Life painting is included with flowers, because it so often accompanies them in pictures.

One of the greatest difficulties with which a teacher has to contend in giving instruction to an inexperienced person, is the desire on the pupil's part to begin working from nature at once, and

an impatience at the necessary previous practice of copying simple studies. The usual cry is, "I hate copying. I want to learn to paint pictures of my own, not to copy those of other people." Now, no teacher considers copying an end in itself, but nearly all teachers know that it is an extremely valuable means of correcting careless habits in the pupil, training his eye to accurate observation, familiarizing him with the use of his materials and the different properties of colors, and giving him some idea of composition. Generations of painters, including many of the greatest, have themselves copied, and, in turn, have made their pupils copy, and the helpfulness of the practice cannot be questioned, assuming that good originals are chosen. In order to paint from nature, the pupil must possess some knowledge of color, and some facility in the use of the brush. It is impossible that the novice, who does not understand even the mechanical management of the medium in which he is working, should be able to make headway at painting "from the round," as work from actual objects is called, since in that case, he must not only be able to handle his materials with some degree of readiness, but must also be able to study out for himself the form, color, lights, shadows, and foreshortening of his model. In working "from the flat," or copying,

the drawing, composition, color, and light and shade, are decided for him, and all that he has to do is to imitate them as closely as possible. He should, therefore, begin his artistic career by copying patiently and conscientiously, striving to reproduce the spirit as well as the general aspect of the picture from which he is working, and to understand the reason for everything he sees in it, — why some parts are dark, others light, some parts distinct, others vague. An artist always has good cause for making such variations, and it is the intellectual part of the pupil's education to find out those causes as he tries to imitate the results. He thus begins to learn how certain effects may be produced, and later on, when he encounters those same effects in nature, he knows what to do in order to render them properly.

Very few students have an opportunity to copy fine, original water color pictures, but the water color facsimiles published by art journals and art lithographers are often very good, and answer the purpose admirably. In copying lithographs, it is always permissible to make the bright colors a little clearer and the shadow tones less complex, because effects in lithographs, which are made by machinery, are obtained in quite a different way from those seen in original brush-work. The gray shades, for example, are often secured by printing

a series of colors one over another, whereas in hand-work, such a shade would frequently be given by one wash of the same general tint as the composite printed one.

Something very simple should be selected for a first attempt, — something easy in drawing, and having few colors. Large pictures, and pictures in which there is much detail, should be avoided until the pupil has gained confidence and knows how to go to work. It is best to select a foreground leaf, or flower, or tree, or figure, in the beginning, and work on that alone, without undertaking to copy the whole of the picture. Objects in the distance are usually too indistinct to be of much value for practice singly. The foreground, be it said, is that part of the picture which appears to be closest to the eye ; the background is the part which seems farthest away ; and the distance lies between the two. A clear, fine outline sketch in pencil should always be made first, in all cases, strong enough to be seen easily, and to serve as a guide for the laying on of color, but not strong enough to show after the painting is finished. Water color washes must always be kept as clean and clear as possible, and nothing mars them more effectually than an admixture of black lead ; and as black lead is sure to get into the color unless the preliminary drawing is very light and delicate, and made with a

rather hard pencil, it is necessary to avoid all negligence in these respects. Carelessness is a quality that has no connection whatever with real art. The term "artistic carelessness," which is sometimes used, signifies merely an apparent ease and absence of effort, which are in reality due to the exercise of much thought and skill, and are simply the art that conceals art. There is no such thing as being too careful, although the artist must learn not to allow his painstaking to come into evidence. Only the positive, tangible forms of the picture are to be shown by the pencil. The shadows must not be outlined nor indicated in any way, as they are not objects, but belong to the domain of color.

It is much easier to find flower and landscape water color facsimiles appropriate for copying, than to find suitable figure studies. The latter are most frequently encountered on calendars and holiday booklets, and are even occasionally seen employed for advertising purposes, by firms who can afford the expense. The little French lithographs of single figures, men and women, which are to be found at picture-dealers' shops, are usually excellent from a technical point of view. The French are strong in the matter of drawing, and often secure artistic effects by very simple means.

While the subject of copying is uppermost, refer-

ence must be made to a temptation which is almost sure to assail the beginner, and which he should systematically resist. It is the temptation to trace the outline of his subject, instead of drawing it freehand, — freehand drawing meaning, of course, drawing done without the aid of instruments or mechanical resources of any kind. Tracing is a mechanical resource, and implies that the person who employs it, has no confidence in his ability to draw. The very fact that he cannot draw, however, is the strongest of arguments against the habit of tracing, because if he constantly traces, he will never learn to draw, and will be quite at a loss when he comes to work from nature, where he cannot trace. The student's drawing should be made with no further guide than the careful observation of the picture to be copied, and if the sketch is wrong, he should correct it in the same way, until he thinks it is as nearly right as he can make it. The only persons who can afford to trace are those who are so accurate draughtsmen that they need no such assistance.

The drawing must, of course, be completed before the coloring is begun; that is, the student must not draw and paint a small portion of the subject he has chosen, and then draw a little more of it and paint that, progressing in a patchwork, piecemeal fashion. If he intends to copy a flower with

a stem and leaf, he should sketch them all in, before he begins to paint, and then carry on the whole study at once, working now on the flower, now on the stem, and now on the leaf, so that they all keep in the same stage of advance, and no part is finished while the rest is still untouched. To think of his work as a whole, and carry it on all together, give the student a breadth and decision which he cannot acquire by regarding it as an aggregation of individual details. Every part of a picture bears some relation more or less close, to the other parts, and to lose the sense of that relationship is to lose the coherence of the picture, in which event it does not "hold together," as artists say, but has a tentative, scattered look that strikes the observer at once, although it is not always easy to put a finger on any definite fault of color or drawing.

One of the first things which a beginner must learn, is how to place his picture on the paper. Unless he has forethought, it will surely happen, sooner or later, that when he has partly finished his sketch, he will find that he has forgotten to regard his subject as a whole, and has begun to draw so near one side of the paper that a portion of the picture will be cut off by the edge. One such experience is usually enough to impress this point on his memory. The proper placing of the draw-

ing is a very simple matter. Having first made sure that the piece of paper he proposes to use is large enough to contain the subject he has selected, he ascertains the central point of the subject, and also the central point of his paper, and begins to draw at the same distance from the middle of his paper that the place he chooses as a starting-point in his subject, is from the middle of that subject. With regard to selecting this starting-point for drawing, he must be guided by his feeling and his eye. Whatever appeals to him as being the most important and conspicuous, should be drawn first. In a flower picture, it is usually the largest group of flowers, or the flower that appears to be the most prominent; with figures, it is generally the head; while in landscape, the horizon line is the first thing to be placed, and then the principal trees or buildings, or whatever chances to form the main feature of the picture.

The student should never begin work when he is tired, nor continue it after he has lost interest, for when his mind is not riveted on what he is doing, it is quite useless for him to keep on at it. While perseverance is necessary, it must be perseverance tempered with judgment. To stop work from indolence or discouragement, is inexcusable; but to stop work from physical weariness, or because the particular subject has been labored at

so long and conscientiously that the interest is worked out of it, is quite permissible. It sometimes happens that a student who is really in earnest, and ardently desires to learn, becomes wrought up by repeated efforts and failures to so great a pitch of nervous irritation that he is quite incapable of doing himself justice, no matter how hard he may try. In that case, also, it is best to lay aside drawing and painting for the day, and to take up some other occupation that will turn the mind into a different channel of thought, and give it a chance to recover its normal tone.

Another thing that the student must never do is to hurry. Haste is a great mistake in art work of any kind, but for a beginner in water color painting, it is especially bad. Haste causes him to slight his drawing, so that he does not fully understand what he is about when he begins to paint. Haste makes him careless in the selecting and mixing of his colors. Haste prevents him from properly exercising his powers of observation, so that he is very likely not to see his subject as it really is. Haste renders his handling of the brush clumsy. In fact, haste has so bad an effect in every way, that time spent in hurried work is time thrown away. The student will learn more from making one study at his leisure, conscientiously and intelligently, than he will in

dashing off half a dozen at high speed in a hit-or-miss way. In wash water color work, every blemish shows, and mistakes are not easily corrected, as they are in oils, or other thick, opaque colors, with which they can be painted over and obliterated. The merit of wash water colors lies in their absolute purity and clearness. Working over the same ground again and again, making alterations and attempting to do away with errors, superinduces muddiness; and when a water color picture becomes muddy, the virtue has departed from it, as a picture, although it still has its worth regarded as a warning.

Before the student begins to put color on his paper, he should consider just what he intends to do, and how he intends to set about it. He ought to understand the reason for every touch he gives his work, otherwise it is of no value to him. If he arrives at a point from which he does not know how to go on, he should not continue to paint at random, but should lay down his brush, and not take it up again until he has fully decided upon the course he will pursue. Having made up his mind what is the best thing to be done, he should have the courage of his convictions, and do it boldly. Possibly he will decide mistakingly, but at least the mistake will be a frank and honest one, from which he can derive a definite lesson.

It is through our mistakes that we learn, but the errors of weakness and timidity are the most difficult to overcome, and have the least educational value. Sometimes a pupil, when asked his reason for having put in some portion of his work in a palpably hesitating and tentative manner, will answer that he did it "so that if it were right it would be there, and if it were wrong it would not be noticed." Now there are many proverbs expressive of the difficulty of doing two opposing things at the same time. One tells us that we "cannot run with the hare and hunt with the hounds," another that we cannot "serve both God and mammon," still another that we cannot "have our cake and eat it too." These adages are just as true with respect to art matters as they are with respect to ordinary life. The timid, tentative pupil gives himself no chance to be fairly and altogether in the right, even when his tendency is in the proper direction, because the style of his work betrays that he was undecided as to what was correct; and he cannot be so undecided that it is not evident when he is going wrong. Serious thought ought to be given to a piece of work before it is begun, and it should then be attacked with some definite resolve.

Mention has already been made of the necessity for keeping water color washes perfectly clear and

free from muddiness. In order to do so, the student requires to have a knowledge of, and control over, color, and a certainty of handling, which he only acquires by long practice. A student will often learn to work intelligently and truthfully from nature, and to make very good original compositions, before he gains the power to keep his color fresh. This freshness is partly dependent upon the perfect cleanliness of the entire water color outfit, and partly dependent upon skill in laying on the washes. To go back and work over ground that is still wet, has a most disastrous effect, and for this reason, every effort should be made to get the right color, and the right depth of color, at the first attempt. It must be borne in mind that when a wash is dry, it is very much paler in tone than when it is moist. The wetter the color is put on, the darker it then appears, in proportion to its actual tint when the water has evaporated. Full allowance must therefore always be made for the "drying out" of the color, as it is called, and it requires some experience to decide just how great this allowance must be. A beginner finds it difficult to believe that he must wash on the paint so much darker than it appears to be in the picture he is copying, and is very apt to try to make his wet wash match the color he sees. If he does this, when his wash is dry it is the mere

ghost of what is really wanted. A water color painter, whether a novice or an adept, should always keep a spare bit of water color paper beside him when he is at work, and test every wash on that before he uses it in his picture. This custom obviates many errors of both degree and quality of coloring.

One of the best ways of learning how to manage color, and of ascertaining the strength, character, and varying possibilities of the several pigments, is to practise the putting on of washes, both plain and graded, without trying to make a picture. For this purpose a piece of water color paper may be marked off by pencil lines, into squares four or five inches in diameter. A wash of color is then put over each square separately, each paint being used by itself, so that the student may learn its individual appearance and effect. The first washes which are attempted should be flat; that is, of the same depth of tone all over, and as smooth and even as possible. After flat washes have been mastered, graded ones should be tried, beginning with the palest possible degree of color at the top of the square, and gradually increasing in strength until the strongest degree is reached at the bottom. These may be varied by beginning with the strong color and allowing it to grow pale, then by making the wash weak at the top

and bottom and heavy in the middle, and then again by having the lightest tone in the middle, and the strongest at the top and bottom. To make such washes well, requires a great deal of practice, and the skill and surety of color handling thus gained are invaluable. As pupils are sometimes encountered who do not know how to obtain strong and weak washes at will, it may be stated that the force of a wash depends upon the proportion of water mixed with the paint. The more water is used, the fainter the color will be. To get the full strength of a color, it should be mixed with only just enough water to allow it to flow well from the brush.

In connection with purity of color, further mention must be made of the desirability of keeping the outfit of water color materials perfectly clean. Not only must the paint-box, slab, and brushes be washed often, but the water in the water-glass must be changed at short intervals during work. The brighter and more delicate are the colors employed, the more frequently must the water be renewed, for it is with this water that the student mixes his colors, and any impurity in it will affect their clearness. Another point to be considered is the cleanliness of the surface upon which the work is to be done. All paper has been handled more or less before it comes into the retail purchaser's pos-

session, and although it may seem to be perfectly clean, every finger-touch leaves upon it a slight trace of oiliness, no matter how delicately cared for the hand may be. Such traces are often quite invisible, but where they remain, the paper does not take the color perfectly. Imperceptible settlings of dust likewise collect on the surface, and affect its power of receiving washes. It is, therefore, always advisable to lightly sponge the paper with clear water about a quarter of an hour before it is to be used. This takes away all extraneous matter, and opens the grain of the paper, securing a clean, receptive surface. It should be allowed to become completely dry before being put to use. If a visible layer of dust has accumulated, it should be blown off previously to washing the paper, and all evident spots should be removed with a soft eraser ; otherwise the sponging process will serve only to rub the impurities into the surface, and "set" them so thoroughly that there is no way of being rid of them. Water has the property of rendering lead pencil marks on paper indelible, hence the pencil sketch that the pupil draws for his guidance in painting should be made after the surface is washed and dried, not before. Else this sketch, which should not show at all in the finished picture, will always be in strong evidence, and cannot be erased. After

what has been said, it is hardly needful to add that the hand should touch the paper as little as possible while work is going on, and should never be rubbed across it.

A thing to be particularly guarded against is the use of an eraser, even of the softest kind, while the paper is wet, or even moist. It must be entirely dry before being touched with a rubber, or the surface is taken off, and a flaw created that will become conspicuous as soon as color is washed over it. The effect is even worse when a damp wash of color is rubbed. Both paper and eraser must be free from every vestige of moisture when they come into conjunction. The erasers belonging to the water color outfit ought never to be taken for general use, as they easily collect dust and dirt, and are then sources of injury instead of purifying agents. They should be protected from dust and dampness, and employed exclusively for water color work. The practice adopted by some water color pupils who are also working in charcoal, of making one rubber serve in both branches of study, is a most unwise one, for a taint of charcoal dust means ruin to a water color wash. Indeed, the whole water color outfit should be reserved for its own special purpose, and should be kept all together by itself.

For all painting done in the house, a proper

arrangement of light is necessary. The light should, as a rule, fall from the top, or from the left side, otherwise the shadow of the student's hand lies upon the surface where he is working, and obscures his view of what he is doing. In case he is left-handed, however, he should let the light fall from the right, for the same reason. When working from an actual object, — a cluster of flowers, a bit of still life, or a figure, for example, — he should, in the majority of cases, sit directly opposite his model, or a little toward the light side. If he places the model between himself and the light, he will see very little except heavy shadows, while if the light is behind the model, he will have no high lights at all, but simply masses of shade diversified by reflections, and in case of translucent objects, like leaves or flower petals, vague lights shining through them. To have some portion of a picture in decided shadow, often heightens its effectiveness and charm; but a picture all shadow is dull and uninteresting.

Be it said, for the benefit of those readers who do not understand the foregoing explanation, that the parts of an object which receive the full rays of unobstructed light directly upon them, are in high light. Reflected light is that which does not fall directly from the light source, but is reflected upon the object from some other object or surface. For

instance, if a group of flowers be placed so that the light falls upon them from the left, the most prominent flowers on the left side will be in high light, while those on the right side are in more or less deep shadow; but if a piece of white paper be held near the flowers on the dark side, it will reflect a certain amount of light upon them, and make them appear much more distinct. It is almost always difficult for a beginner to distinguish the difference between direct and reflected light, but it is a difference that he must learn to appreciate if he is ever to do successful work. Neither reflected light, nor light shining through any object, is ever as brilliant as direct light, although it often appears so by contrast with the dense shadows which environ it; and it should never be left of the same positive value in a picture. If the subject is a white flower, the high lights will be pure white, while the reflected lights, however strong they may seem to be, will really have a veil of shadow over them.

Light is the source of color, and it is only when there is light enough to enable him to see clearly that the student can paint to advantage. Work should be dropped promptly at the closing in of twilight, for painting done in the dusk, is done at random, and is therefore worth nothing, either as practice or achievement. Neither is it advisable

to paint for a very long time continuously. The mind and vision become cramped, just as the body does, and cannot exercise their powers fully and freely on the work in hand. It is an excellent plan to lay down the brush for a few moments occasionally, and either close the eyes, or fix them upon some distant object. Not only do these little recesses freshen the powers of observation and execution, but they are a precaution against any injury to the eyesight. Every oculist will say that to keep the faculty of vision exercised habitually and unremittingly at the same focus, weakens it, and renders it liable to become defective. If the focus is decidedly changed now and then, even if only for a minute or two, the strain is lessened. Students whose vision is any way abnormal should be careful to secure proper glasses before attempting to draw or paint, otherwise some serious ocular difficulty may develop. It goes without saying that in case of inflammation of the eyes, or any other acute local trouble, art work should be abandoned at once, and should not be resumed until the unhealthy condition has quite disappeared.

There are times in the career of every art student when he seems to himself to be making no progress whatever — to be even "going backward," as he dolefully complains. Such a station-

ary period is very disheartening while it lasts, but is by no means to be taken as an indication that he has reached the final limit of his powers. An experience with many pupils goes far to prove the theory that the natural way for the student to advance in his art work is not by an even, steady, forward movement, but by sudden bounds, between which he stands still. Why this should be so, it is not easy to explain. Perhaps he is obliged to pause now and then to digest and assimilate the knowledge he has acquired, before he can put it to practical use; perhaps his artistic instincts are only spasmodically active: but it is certain that a pupil usually produces work of the same general grade for a long time, its quality varying little from week to week, when one day he surprises his teacher and himself by doing something a great deal better than he has ever done before, thus establishing a new standard by which, in turn, he pauses. He must not be discouraged, therefore, when he does not visibly progress, but must work on, patiently doing his best, in the full faith that in course of time that best will suddenly become very much better.

The various difficulties of the beginner having been given a reasonable amount of attention, a few points of interest to more advanced students will now be touched upon. By advanced students are

meant those who have attained a certain degree of deftness in managing their materials, and who are working from actual objects instead of confining themselves to copying. As a rule, from the moment a pupil enters upon the study of painting, he is longing for the hour to come when he will be allowed to work from nature, and will not hesitate to begin long before he is competent to do so, if he can by any means wring a reluctant half-permission from his teacher, who knows that it is a case of "more haste less speed," and that unless the pupil has been fairly well grounded in technique by a thorough course of practice from the flat, the difficulties he will experience in working from the round will seem almost insurmountable to him, and will perhaps so appal him that he will give up the attempt to master them.

Assuming, however, that the student has gone through the prescribed course, and is now struggling for a foothold in the deep water of original work, a question to which he will immediately have to give his thought, is that of how much of what he sees, or thinks that he sees, in his model, he shall put into his picture, and how much he shall omit, and by what means he shall learn to distinguish between what ought to be chosen and what rejected. Of course no artist ever paints every detail that is apparent to his eye, or that he

knows is there; and this point of *knowing* is the rock upon which the bark of the student is apt to split. He cannot have too exact a knowledge of the subject he is painting, but he can easily, and nearly always does, make a wrong use of that knowledge, and is led by it into including in his picture things of which his eye gives him no cognizance. The business of the painter is to paint what he sees in his model, not what he surmises might, could, would, or should be seen, if his eyes were a little sharper, or the light a little more searching, or if he were using a microscope. He is to seize and transcribe upon the paper those characteristics, both of form and color, which appeal to his artistic feeling, putting in everything which is requisite to make his picture rational, and leaving out what seems to him not necessary to its sense. It is only by careful study that the student acquires the power of wise discrimination. His first impulse, if he knows a certain fact about the object he is painting, is to bring that fact into evidence in his picture, without stopping to consider whether the fact is really apparent in the actual object. For example, at the distance from the painter at which a living model stands when posing for a small water color sketch of the full figure, the precise color of the eyes is often a matter of mere conjecture. The lashes, and the shad-

ows in the orbits, modify the tint, and sometimes change it altogether, giving blue or green eyes the general aspect of gray or brown ones. If the inexperienced student is aware, however, that the model's eyes are blue, he is almost sure to act upon that knowledge, and to paint them blue, in doing which, although he is abstractly truthful, he is guilty of artistic falsehood, because he does not really see them blue. Again, in painting in the distant figure of a man, for a touch of life in a landscape picture, the student will be very apt to show the eyes, nose, and mouth, because he knows that a man possesses those features. As a matter of fact, when a man is so far away that he forms a mere unimportant detail in the landscape, he virtually possesses nothing of the sort; he is simply a more or less vaguely defined form, and a bit of color. It is an extremely difficult task to make a pupil understand that he can put himself entirely in the wrong by clinging to the absolute verities. When he finally fully grasps the idea that he can be convicted of a lie, artistically speaking, by showing what he knows to be true, he has made an important advance.

He must, then, work from external appearances, not from his inner consciousness. If a thing looks gray, he must paint it gray, even though he knows that it is actually white, or green, or pink. A leaf

held in the hand, close to the eye, does not present at all the same appearance that it does at a little distance, forming a part of a group of several leaves. The fact that he is aware that it has veins, is no reason for putting them in his picture if he does not see them; nor need his knowledge that its real color is blue-green — if such happens to be the case — prevent him from painting it yellow, if the light chances to strike it in such a way that it seems yellow. He is to paint what he sees, as it looks under existing conditions of light, atmosphere, and distance, and he is to try to see only what is requisite to the artistic end he has in view.

Detail for the mere sake of detail is to be avoided; but where it serves some definite purpose, it may be used with perfect propriety, and when used, it should be absolutely correct, otherwise it becomes a blemish instead of an assistance to the meaning of the picture. Correctness is, indeed, essential in everything. No matter how slightly an object is indicated, the indications should be accurate as far as they go.

The subject of the wrong use of knowledge having been dealt with, it now remains to speak of its right use. To know all about one's subject is an important element of success in any sort of work; as has already been said, we cannot know too much,

although we may lack discretion as to the proper way to employ such knowledge. An artist has, not infrequently, to paint partly from memory, as when he cannot find such models as he wants, or, in the case of flowers, when the specimens from which he is working wilt before his picture is finished. Then a thorough knowledge of his subject stands him in good stead. Without such knowledge, he must either come to a standstill, or risk making some blunder that will expose him to the ridicule of the well-informed. As an illustration of how easy it is to commit such mistakes, the case may be cited of a student who made a picture of sweet peas, in which the flowers were painted from nature, but the foliage was supplied from memory. The leaves were correct in form and color, but were represented as growing alternately on the stem, whereas in reality they grow in pairs, except at the places at which the stem branches, where sometimes three, or even four, are found ranged around the point of division. The pupil was perfectly familiar with sweet peas, but not having the habit of observation, only those facts of form and color had been remembered which were so obvious that they could not be overlooked, if the plant were noticed at all; that is, the characteristic vine form, the tendrils, and the shape of the leaf, which is exceedingly simple. The difficulty that nearly

everybody experiences in answering, without first looking the matter up, the old catch question as to whether the ears of a cow grow in front of the horns, or the horns in front of the ears, is an exemplification of how little most persons really observe when they look at an object. They have always been accustomed to the sight of cows; they are aware that all cows have ears, although whether this knowledge is derived from actually regarding the ears, or from a general consciousness that nearly every sort of animal has ears of some kind, it would be difficult to tell; they also know that most cows have horns, since the horns occupy a prominent situation; but as to the relative position of the horns and ears, they are entirely at a loss. To the ordinary person such matters may seem trifling and of no consequence, but to the artist, all characteristic facts of nature are valuable, and worthy of notice and remembrance.

The student, from the very beginning of his original work, should spare no pains in his efforts to avoid what may be called mistakes of stupidity; that is, mistakes arising from careless observation such as has just been mentioned. He cannot help falling into errors of inexperience and awkwardness, like faulty drawing, coloring, perspective, and composition, but these do not appeal to the professional artist who criticises them, as being laughable.

They are simply faults caused by a lack of familiarity with the technique of painting, and not evidences of a mind ignorant of those general truths which are a part of the equipment of every painter and draughtsman. To paint a bird with the joints of its legs bending the wrong way, however, or a cat with its eyes set straight in its head, instead of obliquely, is to invite ridicule instead of thoughtful criticism.

The opinion of lay persons — that is to say, of persons who have no real knowledge of art, acquired from either reading or practice — is not a reliable guide for the student. Even when he does not intend to become a professional, he should try to keep in line with professional ideals as far as he goes. The criticism of the artistically ignorant is worth nothing as criticism, because it is based upon their personal like or dislike of the subject the painter has chosen, and does not take into consideration the abstract merit of the work. It is possible for a picture to be very good in itself, even when the subject is repulsive or painful. An example that comes to mind in this connection is Doré's painting of wild animals in the Colosseum at night, roaming among the bodies of the Christians whom they have killed. Another is Vereschagin's picture of Sepoys being shot from the muzzles of British cannon after the Indian Mutiny.

The student should, therefore, never let his work be influenced by the approval or condemnation of such critics as have no knowledge of artistic requirements. He should submit his work to competent judgment whenever he has an opportunity of doing so, but should not blindly follow the most skilled advice without reasoning about it, and discovering upon what facts it is founded, and why it is good. If he does a thing merely because he is told to do it, without caring for the logic of it, he may learn to paint dexterously, it is true, but his work will be mechanical, and will have no individual spirit. This applies, of course, only to advanced students, who are painting pictures of their own. The beginner must, naturally, take his elementary teaching on faith, just as he takes his A B C on faith, otherwise he will have no fulcrum for his individual efforts. "He who would command must first learn to obey." Although he should from the first try to understand criticism, he is not in a position to convince himself of its justice by his own reason, until he has progressed far enough to have some artistic idea to express, and some technical means of expressing it, gained by a fair amount of drill both of mind and hand.

In conclusion, a word may be said about originality of method and effect. Experiment is allow-

able, even desirable, but a definite departure from approved lines should never be seriously undertaken until the new way is found to be indubitably as good as or better than the old. To do a thing in a certain way simply and solely because everybody else does it in another way, shows vanity, not originality. An obvious strain after novelty invariably weakens a picture. Originality must be spontaneous, an outgrowth of the painter's own peculiar personality, or of his special environment, or of the knowledge attained by unusually profound study of the various aspects under which the laws of art and nature display themselves. Even if an artist is not particularly original, as long as his drawing and coloring are good, and he deals understandingly with an interesting subject, he cannot be commonplace.

Mathematical perspective need not be touched upon, as it will not be required; nor is it necessary to speak of general perspective by itself, but only in connection with instruction under the specific headings. Amateurs have no need to go deeply into the matter, and even professional artists often rely entirely upon common sense and a perfectly trained eye to insure right perspective effects. If the student can bring himself to regard the actual object or scene that he is drawing as a representation on a flat vertical plane, and put his lines on the

paper just as he sees them arranged on that plane, his sketch will be in proper perspective. Composition is a subject of so much importance, and is usually so bewildering to the inexperienced worker, that it is treated of in a separate chapter.

As this is a book for teaching painting, not drawing, the qualification of good draughtsmanship will hereafter be taken for granted in the student, and all instruction will be given on that understanding.

COLORS

WATER COLOR painting is a comparatively modern development of art, a development which the wonderful improvement in color making during the last half century has rendered possible. There were water color artists, of course, more than fifty years ago, but the distemper painter was the only one who had adequate colors for his purpose before then, and distemper painting partakes far more of the nature of oils than it does of water colors in the present understanding of the term. Distemper colors, like oil colors, are opaque, and more or less thick when used, generally having a base of body white, with which coloring-matter is combined, the whole being made adhesive by the addition of some sort of glue or size. Although water is the medium employed for mixing them, their treatment and effect are so different from those of wash water colors as almost to constitute another branch of art — a branch which will

not be considered here, since the purpose of this book is to deal with water colors in the sense in which they are now most widely understood and generally employed. The term *water color* suggests to the average mind a color which may be washed over paper, and which stains it rather than coats it; and it is for the use of such colors that instruction will be given.

The old-fashioned wash water color pictures were in character very much like the little paintings which children make. A careful black-and-white study was first prepared, which was also shaded in black-and-white, and upon this the color was laid in flat tints, the artist relying entirely, for his modeling, on the original shading, which showed through the color. Sometimes the pictures thus treated were pencil or pen-and-ink sketches, or black-and-white wash drawings, sometimes they were engravings, but in all cases the result was dull and unsatisfactory, if looked at from the point of view of modern water color work, in which the black-and-white sketch is simply the invisible skeleton which serves as a framework upon which the picture itself is modeled in the most brilliant and varied tones. The ancient water colorist had at his command only pigments so pitifully inadequate that it is wonderful that anybody ever seriously attempted to

make use of them. Licorice and tobacco juice were included in the limited list of colors, and the entire palette was of the most fugitive nature.

As this book is intended for the assistance of beginners, it may be well to explain that the word *palette* is used in another sense than the popular one, in which it signifies the plate or tablet upon which a painter sets and mixes his colors. It also means the range of the colors; and when an artist is said to use a small palette, or an extensive one, it is simply a way of expressing the fact that he habitually employs a few or a great many colors. The term *fugitive* is applied to those pigments which fade, or change in any way when exposed to the action of ordinary light and air. All water colors alter slightly in drying, but the permanent ones experience no further change after the water with which they are mixed has once evaporated, while the fugitive ones cannot be relied upon to retain any stated depth or quality of tint.

For the last fifty years, the resources of the water colorist have been steadily increasing. Artists' colormen — that is, the manufacturers of pigments for artists' use — have turned their earnest attention to the discovery, invention, and preparation of durable and brilliant colors for wash work, and their attempts have been as successful as all serious effort, wisely directed, is

sure to be. The list of water colors is now a long one, and includes every variety of tint that can be required by any painter. Chemical experiment has revealed many secrets invaluable to the artist, and well equipped as he now is, the search for better and more lasting colors still continues, with the result that every year or two sees some new and important addition made to his palette. Among the most enterprising and careful, and therefore the most fortunate of these seekers after improved materials and methods of manufacture, are Messrs. Winsor and Newton of London, to whose courtesy the author is indebted for the admirable color-pages which are included at the back of this little text-book, and which will be found not only of inestimable worth to the beginner, but of interest to more advanced workers, to whom the bulk of the reading-matter is not directed. These graded color-washes illustrate the force and quality of the various pigments, and form a valuable reference for the professional painter as well as the amateur. It is a fact worthy of remark that many artists of well-known name and established standing, are often absolutely ignorant of the nature and composition of the colors which they are constantly using. They know that a certain sort of paint will give a particular effect, but of what that paint is made, and

whether it is to be relied upon to hold its tone, they do not know. It unfortunately happens that some of the most brilliant and beautiful colors do not stand well, and require to be used with discretion, and guarded from unnecessary exposure to light, heat, and gas. An artist unaware of this, makes a charming picture with whatever paints suit his fancy, signs it, sells it, and forgets all about it. If he encounter it a year or two later, he may find that all the lovely coloring has disappeared, and that his name is attached to a flat, dull, lifeless expanse that is only the ghost of his original color-scheme. If he do not encounter it, matters are still worse, not that the picture will damage his reputation to any greater extent, but that, not seeing his mistake, he continues to repeat it, while if it is brought home to him, he will learn wisdom in choosing his paints.

Exact information with regard to the composition and permanence of colors is not always easily obtained, however, especially by the inexperienced student. It is true that in one sense it is of no particular consequence if a beginner employs fugitive colors altogether, and exposes them recklessly to the most unfavorable influences; for his earliest efforts are worth nothing as works of art, and later on, when he understands the subject better, he would doubtless be glad if he could know that

they had faded entirely out of existence, and could never reproach him with their faults of ignorance and crudeness. Nevertheless, as the real value of those first attempts at painting is in the practice and training he acquires in making them, it is important for him to learn all he can, from the very beginning, and he would best try to accustom himself at once to the colors which it is most advantageous to employ. There is no possibility of being too completely and thoroughly informed with regard to the details of any occupation upon which one enters, and some knowledge of the pigments he uses, or some source to which he can refer for that knowledge, should be in the possession of every art worker. From data kindly supplied by Messrs. Winsor and Newton, a list of permanent, moderately permanent, and fugitive water colors has been compiled, including a statement of some facts with regard to their composition, and, taken in conjunction with the graded color-washes, it supplies to the student a fund of practical information sufficient for all ordinary purposes.

Water color pictures are generally considered to be of a perishable nature, and they are undeniably more fragile and more liable to destruction than those painted in oils. On the other hand, however, they are not subject to the deterioration

caused by varnishes, driers, and similar substances, which form part of the physical composition of oil pictures, and which are nearly always more or less unfavorably influenced by time. If water colors made only by a reliable manufacturer are chosen, and discrimination is used in their selection, work done with them ought to be practically permanent, with proper care. Pictures painted in water color should never be exposed to direct sunlight nor to moisture. They should always be framed with glass, and thick paper should be pasted over the back of the frame and picture to exclude dust. Only by being protected to this extent can they be kept in good condition. The owner of pictures of any kind should always bear in mind that they are delicate property, and should guard them accordingly.

Permanency, as regards color, is a relative term. There are very few manufactured pigments or dyes made which can withstand the influence of full sunlight acting upon them continuously. In living organisms, sunlight usually has the effect of enriching the color — it intensifies the tone of foliage and deepens the tint of the skin — but where the principle of life is absent, the sun's rays almost always either remove the color entirely with more or less speed, or else change its character. Take for example a living plant that has been kept

in a dark cellar. The leaves and stems are pale, sometimes even white; but if the plant be placed in the sunshine, they will begin to darken at once, and will soon be of a strong, bright green; or, if it is a plant of variegated foliage, like a coleus, all the tints — the red, yellow and maroon — will assume great vividness. If one of these richly colored leaves be broken from the plant and left without water, the life principle soon departs from it, just as the life goes out of an amputated limb. Then the sunlight, that intensified the color of the leaf while it was alive, begins at once to rob it of brilliancy, and to bleach and change it, until, after the lapse of a short time, its characteristic tints have entirely disappeared.

It will therefore be seen that exposure to the direct rays of the sun does not constitute a fair test of the permanence of the color of a pigment, but rather, exposure to the atmosphere and light to which a picture is ordinarily subjected. Broadly speaking, if under these conditions it holds its color, it may be called permanent; if it changes in a slight degree, but not essentially, it is moderately permanent; if it changes entirely, either fading, darkening, or assuming a decidedly different tint, it is fugitive. A quotation from a statement made by Messrs. Winsor and Newton with regard to the color-tests they employ in their own factory

(every reliable color manufacturer tests his colors thoroughly, in order to find out their quality and value, and to ascertain where improvement can be made) may be of use in making this point clear: —

"The word *permanence* is capable of such broad signification that it has seemed desirable to define with some exactitude what is meant . . . by the permanence of a color. By the permanence of a water color is meant its durability when washed on Whatman paper and exposed freely, under a glass frame, for a series of years, to ordinary daylight; no special precautions (other than the usual pasting of the back of the frame) being taken to prevent the access of an ordinary town atmosphere. By an ordinary town atmosphere is signified an atmosphere containing normally, as the active change-producing constituents, oxygen, moisture, and a small percentage of carbonic acid, together with chronic traces of sulphur acids, spasmodic traces of sulphuretted hydrogen, and a certain amount of dust and organic matter in suspension. . . .

"It will be seen from the above definitions that our colors are tested under conditions which are as nearly as possible the same as those which obtain in the ordinary practice of picture-painting and picture-exposure.

"With regard to the method of arranging the

colors in three classes, it is, of course, impossible to draw any hard-and-fast line between a permanent and a moderately permanent, or a moderately permanent and a fugitive, color. The arrangement is an arbitrary one, and made only for convenience. Finally it should be pointed out that one very important consideration which comes into play in the case of actual pictures — the mutual action of mixed colors — is not taken into account at all in the classification, which has reference only to colors exposed *per se*."

Some of the mixed colors classified as moderately permanent or fugitive, have a permanent constituent, and in that case they do not change in the absolute sense of the word. Only the unstable element is affected ; but as any noticeable alteration makes a color untrustworthy, these paints are necessarily classed with the characteristically uncertain ones.

PERMANENT COLORS

Alizarin Crimson: A Lake prepared from artificial Alizarin.

Aureolin: Double Nitrate of Cobalt and Potassium.

Aurora Yellow: An opaque variety of Sulphide of Cadmium.

Bistre: A brown soot obtained from Wood.

Black Lead: Prepared Graphite.

Blue Black: A variety of Carbon Black, prepared by charring Woody Tissue.

British Ink.

Brown Madder: A Lake prepared from the Madder Root.

Brown Ochre: A Native Earth.

Burnt Carmine: Formerly obtained by charring Cochineal Carmine. Winsor and Newton now prepare a permanent article from Madder Carmine.

Burnt Lake: Formerly obtained by heating Crimson Lake. A more permanent variety is now prepared from Madder Lake.

Burnt Sienna: Calcined Raw Sienna.

Burnt Umber: Calcined Raw Umber.

Cadmium Yellow:
Cadmium Yellow, pale:
Cadmium Orange:
} Different and partly transparent varieties of Sulphide of Cadmium.

Cerulean Blue: Stannate of Cobalt.

Charcoal Gray: A gray made of Charcoal.

Chinese White: A specially dense variety of Oxide of Zinc.

Cobalt Blue: Alumina tinctured with Oxide of Cobalt.

Cobalt Green: Zinc Oxide tinctured with Oxide of Cobalt.

Cologne Earth: Calcined Vandyke Brown.

Constant White: Barium Sulphate.

French Blue: An artificial Ultramarine.

French Ultramarine: Synonymous with French Blue.

Indian Purple: Originally a fugitive color made of Cochineal Lake with a base of Copper. A permanent substitute is now manufactured from Madder Lake and French Ultramarine.

Indian Red: A variety of Iron Oxide.

Indian Yellow: Prepared Purree imported from India.

Ivory Black: A Carbon Black prepared by charring Ivory.

Lamp Black: A variety of Carbon Black obtained by the imperfect combustion of Hydrocarbons.

Lemon Yellow: A preparation of Chromate of Barium.

Light Red: Calcined Yellow Ochre.

Madder Carmine: A Lake prepared from the Madder Root.

Madder Lake: Synonymous with Rose Madder.

Mars Orange: } Earths containing Oxide of Iron as the
Mars Yellow: } essential coloring constituent.

Naples Yellow: In water color, a combination of Zinc White and Cadmium Yellow.

Neutral Orange: A mixture of Cadmium Yellow and Venetian Red.

New Blue: A pale variety of French Ultramarine.

Oxide of Chromium: Chromium Sesquioxide.

Permanent Blue: A variety of French Ultramarine.

Permanent Violet: A new mineral pigment introduced by Winsor and Newton, containing Manganese as its tinctorial constituent.

Permanent White: Synonymous with Chinese White.

Permanent Yellow: A preparation of Chromate of Barium and Zinc White.

Pink Madder: A variety of Rose Madder.

Primrose Aureolin: A pale variety of Aureolin.

Purple Madder: A Lake prepared from the Madder Root.

Raw Sienna: Prepared Native Earth.
Raw Umber: Native Umber.
Roman Ochre: Prepared Native Earth.
Roman Sepia: Sepia tinted with Sienna.
Rose Madder: A Lake prepared from the Madder Root.
Rubens' Madder: A Lake prepared from the Madder Root.
Scarlet Madder: A weak variety of Rose Madder.
Sepia: In water color, a preparation of genuine Cuttlefish Bags.
Smalt: Silicate of Cobalt.
Terre Verte: A Native Earth.
Ultramarine.Genuine: The choicest extract of Lapis Lazuli.
Ultramarine Ash: The second quality of blue obtained from Lapis Lazuli.
Vandyke Brown: Prepared Native Earth.
Venetian Red: Artificially prepared Sesquioxide of Iron.
Veronese Green: Synonymous with Viridian.
Viridian: A hydrated and transparent variety of Chromium Sesquioxide.
Yellow Ochre: Prepared Native Earth.

MODERATELY PERMANENT COLORS

Antwerp Blue: A weak variety of Prussian Blue containing Alumina.
Bronze: A mixed Chrome Green.
Brown Pink: A Lake made from Quercitron Bark.
Chrome Yellow: Normal Chromate of Lead.
Chrome Lemon: A combination of Chromate and Sulphate of Lead.
Chrome Deep: }
Chrome Orange: } Chromates of Lead, more or less basic.

Chrome Green: A preparation of Chrome Yellow and Prussian Blue.

Cyanine Blue: Synonymous with Leitch's Blue.

Emerald Green.

Field's Orange Vermilion: A specially levigated variety of Orange Vermilion.

Jaune Brilliant: A variety of Naples Yellow prepared from Chrome Yellow and White Lead.

Leitch's Blue: A combination of Prussian Blue and Cobalt.

Malachite Green: Native Carbonate of Copper.

Orange Vermilion: Sulphide of Mercury.

Prussian Blue: Ferrocyanide of Iron, the insoluble variety.

Scarlet Vermilion: Sulphide of Mercury.

Vermilion: A variety of Mercuric Sulphide.

FUGITIVE COLORS

Carmine:
Carmine Lake:
Crimson Lake:
} Lakes prepared from Cochineal.

Dragon's Blood: The genuine Dragon's Blood, a resin, being exceedingly fugitive, an imitation pigment is now prepared from Burnt Sienna, Cochineal Lake, and Gamboge.

Flake White: Basic Carbonate of Lead.

Gallstone: The real Gallstone (from the bladders of oxen) being excessively fugitive, an imitation is prepared from Yellow Carmine.

Gamboge: A preparation of the Gum Resin known under this name.

Geranium Lake: An extremely fugitive Lake prepared from an artificial dye.

Green Lake: A combination of Quercitron Lake and Prussian Blue.

Hooker's Green: No. 1 } Preparations of Prussian Blue and
Hooker's Green: No. 2 } Gamboge.

Indigo: A blue extracted from the Indigo Plant.

Intense Blue: An extract of Indigo.

Italian Pink: A Lake obtained from Quercitron Bark.

King's Yellow: Sulphide of Arsenic.

Magenta: } Aniline Lakes. Very fugitive.
Mauve: }

Neutral Tint: A combination of Indigo, Cochineal Lake, and Carbon Black.

Olive Green: A mixture of Indian Yellow, Umber, and Indigo.

Payne's Gray: A mixture of Indigo, Cochineal Lake, and Carbon Black.

PrussianGreen: A mixture of Gamboge and Prussian Blue.

Pure Scarlet: Mercuric Iodide.

Purple Lake: A purple modification of Crimson Lake.

Rose Lake: A new color, similar in composition to Geranium Lake.

Sap Green: A mixture of genuine Sap Green (a concreted vegetable juice) with Green Lake.

Scarlet Lake: An intimate combination of Vermilion and Alizarin Crimson.

Violet Carmine: A Lake obtained from the root of the Anchusa Tinctoria.

Warm Sepia: Sepia tinted with Cochineal Lake and Sienna.

Yellow Carmine: A concentrated Lake prepared from Quercitron Bark.

Yellow Lake: An extract of Quercitron Bark.

Yellow Madder: Synonymous with Yellow Carmine.

The first advice to be given to a beginner who is purchasing his outfit of painting-materials is this: do not economize by buying a poor grade of colors because they are cheap. Exceptionally cheap colors, made by unknown firms, are sure to be inferior in quality, and imperfectly prepared. They are coarse, or gritty, or hard, or uneven, or wrong in some way, or they could not be sold for a song, because good materials and good workmanship are necessary to the producing of good colors, and a manufacturer cannot put good materials and good workmanship into the making of his wares without charging a fair price for the finished article. It is difficult enough to learn to handle color when the paints are of the best quality, even in tone, finely ground, clear, and free from lumps and impurities; but when the student has to contend not only with his own ignorance and clumsiness, but with defects of material which would irritate a skilful artist, he has need of an exceptional amount of patience to enable him to persist in the effort to learn.

The beginner, therefore, must be as careful to obtain standard colors as is the professional painter. There is a great difference in the price of individual colors made by the same manufacturer, this difference being dependent upon the cost of the materials composing them, and upon

the degree of expense incurred in their preparation, all colors not being prepared in the same way. It is not necessary to lay in a stock of all the very high-priced colors, for only a few of them are really requisite to a suitable outfit. The most generally useful paints are mainly those of medium cost.

The water color box, or case, should never be bought already filled by the art dealer, because he has no knowledge whatever of the assortment of colors which any one individual student is likely to need; and if a full box is selected at hazard, it will be sure to contain a number of paints, some of them costly, which the purchaser will have no occasion to use, and it will lack many which are absolutely necessary. The only way to be certain of securing a satisfactory stock, is to obtain the assistance of some good artist who is following the same line of work that the student wishes to pursue. No artist in these days ever makes any mystery of the colors he employs, for he recognizes that the worth of a picture does not lie in the use of any special pigment, the secret of which is to be jealously guarded, but in the amount of thought and skill which he puts into it, which are evidences of a power that only talent, conscientious study, and time can give. Nobody can steal an artist's experience away from him,

and his list of colors is comparatively of no consequence.

After the student, therefore, has found out from an authoritative source the names of the paints which will be most useful to him, he should buy an empty color-box, and have it filled according to his own choice. It is not desirable to have a great number of colors, for an over-full palette is a trouble and an expense rather than an advantage. The skill of an artist is not measured by the number of different pigments he uses, but by the ability which he shows in manipulating what he does employ. It is only the tyro who feels that he cannot accomplish anything unless he has the entire stock of the colorman to fall back upon. Experience will teach him that a few colors, well selected, will afford him quite as wide a field of variety as he can comfortably occupy, after he has learned their properties individually, and in the almost inexhaustible number of combinations which are possible with them. The following list of twenty-six colors, is one which will be found of general use, and which will suffice to carry out all the instructions given in this book, with the exception of monochrome work in black-and-white, for which the paint called *Lamp Black* is necessary: —

Aureolin.
Pale Cadmium.
Orange Cadmium.
Indian Yellow.
Yellow Ochre.
Emerald Green.
Hooker's Green No. 2.
Indigo.
Prussian Blue.
French Blue.
New Blue.
Permanent Violet.
Purple Madder.
Rose Madder.
Light Red.
Indian Red.
Carmine.
Burnt Carmine.
Burnt Sienna.
Brown Ochre.
Raw Umber.
Burnt Umber.
Vandyke Brown.
Brown Madder.
Sepia.
Chinese White.

This list cannot be assumed to be final, in the present stage of color manufacture, but it is as satisfactory as can now be made, and will answer all practical purposes. It will be observed that it is not entirely composed of permanent colors, but this is because no adequate substitutes are yet available for the moderately permanent and fugitive colors included. Wherever it has been possible, durable pigments have been chosen, and all those notoriously temporary have been avoided.

There are no colors made which can vie in brilliancy and purity with those seen in nature, and this lack will be felt most forcibly by the flower painter, who longs to reproduce the vivid tints of his models, but realizes that he can never hope

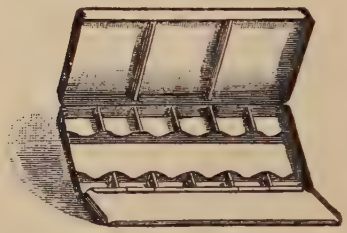
to do more than approximate them. The closest approach to the dazzlingly clear and bright pinks, reds, and purples often seen in flowers, is found in the aniline colors, and it is hardly surprising that some artists succumb to the temptation of using them, against a better knowledge. These colors are wonderfully attractive when first applied, but are consistently treacherous, if such a contradiction in terms is admissible; and a picture painted with them is sure to go to destruction in a very short time. As there is a demand for them, they are supplied by the color-makers, but manufacturers do not guarantee them, and are perpetually seeking to discover permanent substitutes.

Water colors come in three forms, — in dry cakes, in china pans, and in metal tubes like oil colors. The dry cakes, although suitable for some purposes, are not desirable for the ordinary water colorist, as they are hard and brittle. They do not yield their color quickly nor lavishly enough for general work, and as they are easily broken, they are apt to crumble away and be wasted. With tube paints all these disadvantages are avoided, but tubes are bulky and heavy, and therefore awkward to care for and to carry in any number. The pan colors are the most satisfactory, for they are sufficiently moist to work easily, and in small enough compass to be little trouble. The half-pan size is recommended

for the majority of colors, because the half-pans take up less room than the whole ones, and are renewed oftener, and it is pleasanter to use fresh color than that which has been open for some time. If there are one or two special colors which are consumed in larger quantity than the rest, these may be bought in whole pans. It is best to always use the Rose Madder and the Chinese White which come in tubes ; the Rose Madder because it is a gummy color that dries and hardens rapidly on exposure to the air, and is apt to become too solid in the pan ; the Chinese White because it is used very rarely, and must be perfectly soft and creamy when it is used.

There are various styles and sizes of water color boxes made, those of japanned metal being the best. One should be chosen which is divided into compartments for whole pans, because two half-pans can be fitted into the compartment, and it is well to be able to carry whole pans upon occasion. The box should be large enough to hold all the colors comfortably, but no allowance need be made for the length of the brushes, because they ought never to be kept in the box, although box-makers usually provide a long division for them. This division may be occupied by the two tube colors, the sponge, the rubbers, and the penknife, if the box is large. The ordinary American box, which

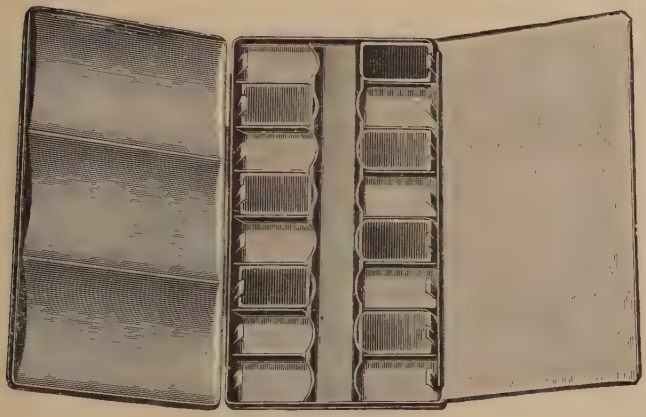
is the least expensive of any, and will answer the purpose sufficiently well, is divided off by rigid metal partitions which simply serve to keep the pans from sliding about, and do not prevent them from falling out. Messrs. Winsor and Newton make a more costly box, in which each compartment is provided with a little spring which grips the pan and holds it in place even if the box be upset. The pan is removed by pressing back the spring. There are also water color boxes arranged for the accommodation of tube colors entirely, or of tube and pan colors both.



Box for Pans.

After the box has been chosen and fitted with paints, the next thing for the beginner to do is to learn to distinguish the colors by name. This he cannot hope to do immediately, because to the inexperienced eye, the different depths of wash of the same paint seem to be made by different colors; but the sooner he becomes acquainted with his palette, the sooner will he gain a sense of certainty in his work. For the last few years, Messrs. Winsor and Newton have adopted the plan of pasting

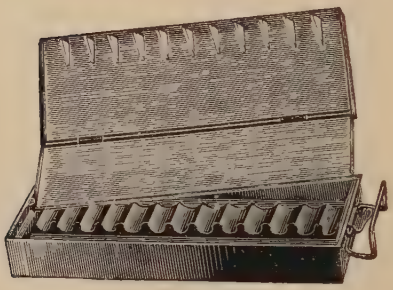
a slip of paper, bearing the name of the color, directly upon the bottom of the china pan which contains it. Formerly the name was placed only on the tin-foil wrapper, and when it was removed, confusion was sure to ensue. It is necessary, however, to learn not only what paints are in the box,



English Spring-fitted Box.

but what each one is, without looking at the label. Of course the beginner must refer to the names at first, in order to become familiar with them, but he should learn as soon as possible to identify a color merely by its appearance. The process of memorizing will be made easier if the colors are kept in the same order, each one having its own

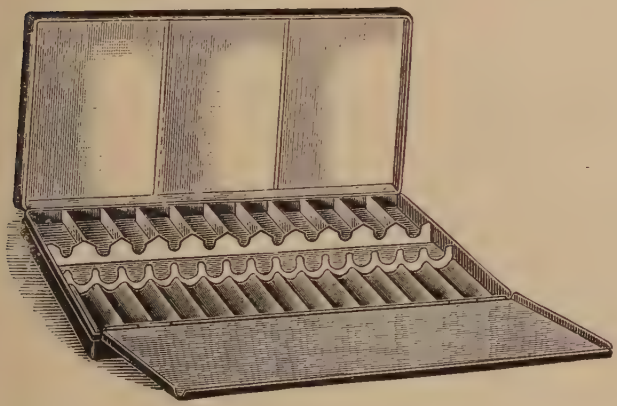
special compartment where it is always to be found. The chromatic succession is the best and simplest arrangement to adopt. Beginning with the yellows, because they are the lightest and most brilliant, they should be placed all together, next to them coming the group of greens, then the blues, then the purples, then the reds, and last the browns.



Box for Tubes.

The next point about which it is necessary to speak in relation to color, is that of cleanliness. Proper care of both box and paints cannot be too strongly insisted upon nor too conscientiously observed. The characteristic charm of water color work is its purity, freshness, and transparency. If it lack these qualities, it has no excuse for being, because oils excel it in richness, and pastels in softness. When the box and paint-pans are covered with streaks and drippings of different colors all run together in muddy confusion, this muddiness will contaminate the picture more or less. If a box is habitually dirty, and the paints are habit-

ually stained with other colors, this evil state of things is to be ascribed to one of three causes: the owner knows nothing about water color painting, or he is exceedingly lazy and careless, or he has the idea that a soiled and untidy box looks artistic. In any or all of these cases, he is in the



Box for Pans and Tubes.

wrong, and should hasten to put himself in the right as soon as possible. It is true that some very good pictures have come out of very dirty boxes, but it was in spite, and not because, of the untidiness; and the pictures would have been still better had the boxes been clean, because purity in a picture means purity in the color used for it, and color

will not remain uncontaminated in a carelessly kept box. The inside of the box and the surfaces upon which the color-mixing is done, should be washed perfectly clean, and wiped dry at the close of work, and even at intervals while work is going on, if many colors are employed, and painting is continued for a long time. Color should never be dragged over from one pan upon another. Each variety of paint should be kept free from other kinds, so that when the student dips his brush into a pan supposed to contain a certain color, he will obtain that color in its integrity, free from all foreign tint.

The softer the condition of paints, the greater the facility with which they can be used: and many, indeed most, teachers advise pupils to put a few drops of water into each pan before beginning work. This practice has its obvious advantages, and when the paints are used every day it does no harm. When they are used only occasionally, however, and have time to dry in the intervals, wetting them so excessively makes them crack and crumble into hard lumps which are difficult to manage. If colors which have been opened are laid aside for any length of time, a drop of glycerine added to each will help to keep them moist and workable. It is, of course, unnecessary to say that the paint-box must always be kept

tightly closed when it is not in use, to exclude dust and air.

When paints have become so dry as to be like gravel, it is better to throw them away, for the work of attempting to restore them to proper condition again, will be more than they are worth, and is quite likely to prove futile. With the best care, a great deal of paint is wasted unavoidably. Much is washed out of the brushes and the box, and a certain amount always remains in the corners of the pans and in the tubes. This must be accepted as one of the conditions of water color work, and the only way of making up for it is to be guiltless of any wanton waste, either by allowing paints to crack, or by letting them become so much soiled that the whole top has to be sponged away before it is possible to come to the actual tint.

Every color has its own peculiar property of luminousness, flatness, transparence, atmosphere, or distance, and it is a large part of the work of an artist to learn these properties, and to make use of them in the proper way. The list of twenty-six paints which has been given, includes colors which represent all these qualities; and this palette will serve for landscape and figure work as well as for flowers. While a list composed for any one alone of these branches of art, would contain

some names of paints not mentioned in this one, all which are absolutely necessary for all-round use are put down. The preponderance of brilliant pigments is due to the fact that flowers cannot be painted without them ; and while subdued tones are easily made by combining bright colors, as red and blue to make gray, it is impossible to mix subdued colors and obtain thereby a bright one. The vivid colors practically include all the rest, and are indispensable, whether for use in a pure state or in combinations.

If twenty-six colors seem too few to the beginner, who is, perhaps, acquainted with artists who have forty or more in their boxes, let him remember that he does not yet understand the management and possibilities of even one color, and that twenty-six are quite enough to show him the technique of washes and general handling.

MATERIALS

THERE are few persons who do not find the shop of a dealer in artists' materials an attractive place. The professional painter is interested in examining the thousand and one useful or useless inventions which are offered for his inspection, even if he has no occasion to buy any of them, and he enjoys looking over the stock and choosing at leisure what is suited to his own special needs. The art student is stimulated to fresh efforts by the sight of the piles of sketching-blocks, the array

of paints, each individual one so neatly wrapped and labeled, the sheaves of brushes of all sizes and kinds, and the various other objects, of which he already knows the use, or hopes by and by to know it. The lay person, who wanders in accidentally, or accompanies some friend who has business there, feels that he is breathing the atmosphere of art, and observes with keen interest the customers, some of whom display such extreme solicitude in making a choice among articles which look to the outsider precisely alike. He has the exciting consciousness that he may be gazing upon an angel unawares, — that any one of these intent purchasers may be some noted artist whose name he has seen in the newspapers, and whose pictures he has viewed on gallery walls,— and he envies the art dealer his familiarity with these great personages, and his admittance, as it were, behind the scenes.

Who that has ever been an art student, can forget the feeling inspired by his very first outfit of materials, possessed while he was still ignorant of even the rudiments of art — the sense of elevation given by the mere ownership of the blocks and boards and paints and brushes, all so new and fresh and technical-looking? Perhaps such articles have become things of daily and yearly commonplace to him now, of no more thrilling interest

than his dinner-plate or his gloves ; but there was a time when they were surrounded by a halo of exhilarating novelty, and were suggestive of all sorts of vague and exciting possibilities in the way of artistic achievement. The charm is a brief one, and, like some others, is experienced but once in a lifetime. The epoch soon arrives when the student discovers that the possession of an outfit of materials is the shortest and easiest step in an artist's career, and that there is no royal road to learnir where drawing and painting are concerned, any more than there is in other departments of knowledge. He finds out that the possibilities of his materials, as he develops them, are not always attractive ; that when he puts that fair, clean paper and those tempting-looking paints to actual use, their romantic suggestions vanish before the positive result. This is the really trying stage in art work, for there is an even chance that the novice will lose patience and courage, and abandon the idea of learning. If he persists in spite of his disillusionment, he gains his second wind, so to speak, and before long begins to see that he is really making some progress ; slow, to be sure, but definite and inspiriting.

The question of materials is a wide one. It is possible to spend an immense amount of money upon them unnecessarily, and it is equally possi-

ble to economize so strictly that one's work is hampered and limited. The theory that genuine talent can produce satisfactory work without proper means, is false. An artist requires to have the right tools for the pursuit of his calling, just as an artisan does, and must have them if he is to achieve anything valuable. Of course it will not do for an inexperienced person to lay in his stock of materials without first having competent advice about the matter, for if he goes into an artists' supply shop and buys at random whatever he fancies it would be desirable to have, he is certain to waste a great deal of money, and to come away without some things which are absolutely necessary. On general principles, he should provide himself with everything found to be really requisite, but buy nothing of which he does not seriously feel the lack.

It is well to learn to work with a comparatively small equipment, because there may be occasion to carry and use the outfit while traveling, and then the advisability of confining the material furnishings within a portable compass, will be strongly felt. The decision as to what is necessary and what is not, must be made with judgment, however, and nothing must be omitted that is essential to convenience and the production of good work.

As has been already said in the chapter devoted to Colors, the advice of some one who understands such affairs should be obtained before any outlay is made. A student who intends to begin work with any special teacher, will naturally seek that teacher's counsel, and buy whatever materials he recommends, for every artist has his own peculiar preferences in the matter of paints, brushes, paper, and accessories, and prescribes for the use of his pupils what he himself has found satisfactory; but a student who means to work by himself, with only the aid of a text-book, must rely upon that for all necessary information, and be guided by what it says.

It should be borne in mind that the study of art from text-books alone is always more difficult and tedious than the same course of instruction carried on with a teacher, and requires more patience and perseverance. The stimulus afforded by frequent intercourse with a man or woman who has obtained a mastery over difficulties with which the student is just beginning to contend, is of much help, and the personality of a teacher also counts for a great deal. There is the additional advantage of having advice upon special questions which arise in the course of drawing or painting, and of receiving a direct criticism of the work after it is finished. The student who

acquires his instruction from a book, must be his own critic, and the benefit he derives from what he reads will be determined by the degree of care with which he follows out, with mind and hand, the ideas presented to him.

The subject of Colors has already been treated at length in the previous chapter, and need not be again brought forward. It being taken for granted that the student has provided himself with the twenty-six paints recommended, and with a suitable box in which to keep them, the matter of brushes next arises for consideration, and simple as it seems, it is capable of great complication, for there is an infinite variety of brushes of different sizes, different shapes, and different kinds of hair. Colors and brushes are the two really expensive items in the outfit of a water colorist, for they are not only costly at the beginning, but have to be renewed with greater or less frequency. There is no economy in buying a poor brush, or, indeed, in buying poor art materials of any kind. The real economy lies in having all essential articles of a standard quality, and taking so good care of them that they will last for a long time. As far as brushes are concerned, although they are rather high-priced in the first place, that is not of much importance if they are so well treated that they can be used until they are really worn to such

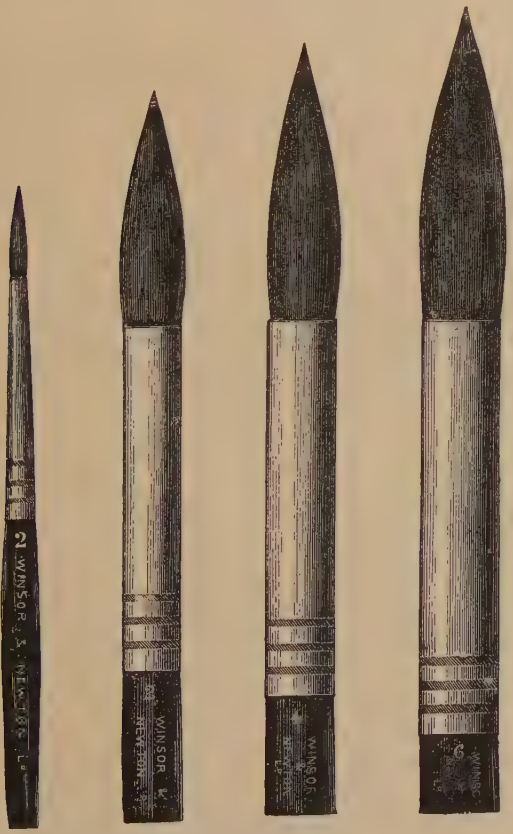
a degree as to be unserviceable. Two brushes, carefully kept, will last for several months, even if employed daily; but they can be ruined in two days by ignorance or negligence. Novices are to be excused, if they have never been told how brushes should be treated; or, rather, how they should not be treated; but there are persons who have had experience enough to teach them better, who cannot handle a brush once without destroying its delicacy.

A brush should never be permitted to rest upon its tip, either in or out of water, for the point or edge is thereby destroyed at once, and when that is gone, the brush is no longer a sensitive instrument, obedient to the hand, but is clumsy in its action. It should never remain in water for any length of time, as the hairs become loosened and injured in quality. It should never be carried in a box, nor kept in any position where the tip is likely to be pressed against anything. The point or edge should come in contact with nothing except paint and paper, and that only while it is in use. In taking paint out of the pans, the brush should never be pushed forward into them, but should be placed in the middle and drawn backward out of them. In short, the tendency of the hairs to come together to a point, should always be encouraged by every possible means. After

the brush has been used, all the color should be washed out in clean water, the brush should be wiped with a cloth, and the hairs brought to a point, in which shape it should be allowed to dry. The best way to keep brushes when they are out of use, is to stand them on the end of the handle in a vase or jar deep enough to hold them in an upright position. In any place where moths prevail, it is necessary to keep a constant surveillance over brushes, as they are extremely liable to damage from these pests.

Water color brushes are made of camel's hair, red sable, and brown sable. The camel's-hair brushes, which are by far the cheapest, are not fit for anything excepting play painting, and should never be bought by anybody preparing for earnest work, as they are soft and characterless, lack body and spring, and cannot be prevented from spreading at the tip when in use. The brown sable brushes are the most expensive, and it is optional with the student whether he will select those, or choose the somewhat less costly brushes made of red sable, which are substantial, serviceable, and will answer every purpose. For Flower, Fruit, and Still Life work, two large, round ones will be sufficient. For Figures, a small round one will be required in addition to these. This set of three red sable brushes will also answer for Marines

and Landscapes, but for the last-named class of sketches, an ordinary flat bristle brush of medium size, such as is made for the use of oil painters,



Red Sable Brushes.

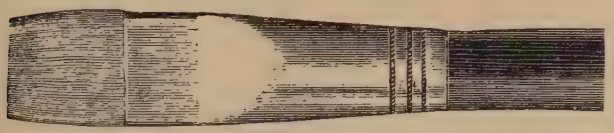
will also be serviceable. These bristle brushes cost very little and require no special care.

Pictures are given which show the kind of brushes required, and their actual size. Brushes are numbered differently in England and America, and those illustrated are marked according to the English style. The small Number Two, large Number Two, and large Number Four form a satisfactory trio, but if the student is disposed to be self-indulgent in the matter of expense, he may substitute large Number Six for large Number Two.

Brushes ought invariably to be carefully examined by the intending purchaser before they are paid for, to make sure that they are in perfect condition. Dealers in art materials always allow customers to make their own selection from the stock of brushes, and usually keep a cup of water at hand so that they may be tested, if that is desired. In order to properly test a sable brush, it should be held in water until it is saturated, and then withdrawn. If, on being lightly smoothed to a point with the fingers, it splits, looks blunt, or seems irregular, or if it shows broken hairs, or hairs which have a tendency to separate from the body of the brush, it should be rejected. If, on the contrary, it is full and solid at the top and in the middle, and tapers quickly to a fine,

symmetrical point, with no straggling hairs, it is faultless.

The idea of using so large brushes may startle the student, and possibly he will privately resolve to begin work with the little one, and wait until later to adopt the more imposing sizes. In this case he will be altogether wrong. The little brush is meant only for occasional use, such as painting the features, hands and feet of very small figures, or adding foreground and foliage details in



Bristle Brush.

little landscapes. The bulk of the work is done with the large brushes; and if they are cared for with the solicitude that they deserve, they will be found susceptible of the most delicate manipulation. There are several conclusive reasons for employing large brushes instead of small ones. They have more spring; they usually possess a better point; the flow of color is smoother and more continuous; a greater amount of ground can be covered at a time, thus increasing evenness of tint; and a firm, bold method of painting is ac-

quired that can never be attained by the use of small brushes, which limit the power of expression and induce a cramped style.

Before leaving the subject of brushes, it may be well to say that every artist does not lay such stress upon their care. An artist is to be encountered, now and then, who puts his brush in his mouth, and even bites it — not the handle, which is of no consequence, but the hair. Such examples to the contrary notwithstanding, universal experience has proved that however well a man can work with poor tools, he can work still better with good ones. That a person who is in a position to know what is right, persists in a careless and destructive act, is not to be taken as a proof that the act is advisable. It is no extra trouble to take the simple precautions advised, because after the habit of care is once formed, it becomes second nature, and is obeyed unconsciously. The only real difficulty with regard to the safety of brushes is that experienced in transporting them, and this is overcome by carrying

Brush Case.

them in a japanned case made for the purpose, which has a slide provided with elastic straps. These hold the brushes so that they cannot slip against the end of the case. A flat, home-made holder, stiffened with pasteboard and provided with straps in the same way, will answer equally well.

Colors and brushes being decided upon, the next question of importance is that of paper. The only kind that will take water color well, is that which is made expressly for it, but there are many varieties, differing in weight, thickness, and surface. The Whatman papers are generally recognized as the standard, and are widely used. They are to be obtained in smooth, medium, and rough qualities. The very smooth kind is what is known as hot-pressed paper. It has a glassy surface, and should be avoided for the sort of work of which this book treats. It is suitable for illuminating, fine designing, and similar purposes where very little color, very little moisture, and very small touches are employed, but it does not receive broad washes well. There is also a smooth, cold-pressed paper, which the student may use for any very small and detailed work that he chooses to do when he has become experienced, but it is not good for general painting. The surface of the medium paper has a moderate "tooth," as the roughness is termed,

while the rough kind is, as its name indicates, very coarse and uneven. For a beginner, the medium paper is the best, because it takes color well and is not expensive. Later on, when he makes fewer mistakes and has learned to control the flow of his color, he will often prefer the effect given by the rougher surface.

Water color paper may be obtained in separate sheets, or made up into blocks of different sizes. For his earlier efforts, such as trying his colors, making color-washes, plain and graded, and painting small copies for practice, the student will do well to work upon a block of dimensions large enough not to limit him, and small enough for it to be easily handled. Eleven or twelve inches by fifteen is a good size. Paper in the form of blocks or pads, affords a solid, substantial surface for painting, and is kept in place, and even stretched to a certain extent, by the binding around the edge. Each sheet should be removed only after the work upon it is dry. If it be taken off the pad while the paint is wet, especially if the paper has "buckled," as it is called, that is, if it has swelled and wrinkled under the action of moisture, the water, in evaporating, will cause it to warp; while if it is left on the block, the grip of the binding around the edge will pull it tight and smooth as it shrinks in drying. There is little

satisfaction in working on loose pieces of paper, because of this buckling, warping tendency. The thinner the paper, the more quickly and strongly is it thus affected. If water color paper is bought in separate sheets, before it is used it should be stretched on a wooden frame, over which heavy muslin is tightly drawn and tacked, or on a drawing-board, and should not be cut off until the painting is finished. As stretching paper takes a little time and trouble, it is not worth while to do it for preliminary studies, for which the block will answer equally well; but for work of any importance, heavy paper, well stretched, affords, with one exception, the most pleasing and manageable surface, and gives the best results.

As there are doubtless persons who do not know how to stretch paper, an explanation of the process may be desirable. If the paper is to be stretched upon a drawing-board, the size of the paper need not be prescribed, except that it must not be more than half an inch larger than the board all around. If it is that much larger, the extra half an inch serves to hold the paste, and is turned over the edge of the board and fastened there, instead of on the face. If it is smaller, it is fastened down to the surface. The piece of paper is first laid flat on the board, with the right side upward, and all the edges are turned down about half an inch, still

on the right side, with a sharp fold. The entire sheet is then thoroughly dampened, so that it swells and puffs up, but it must not be so overcharged with water that it loses its consistency and pulls apart. While it is wet, the turned-down edges are covered with paste and bent back against the board, the paper then being pressed flat all over with a moist sponge. If the paste holds, as it should, the sheet will be perfectly smooth and tight when it is dry. When a frame is used instead of a drawing-board, the paper is always left large enough to overlap half an inch, that the pasting may be done on the edges of the frame instead of on the surface.

The right side of a sheet of paper may be ascertained by holding it up against the light and looking at the water-mark. The side upon which the maker's name can be read properly is the right side. It should be mentioned that paper cannot be stretched upon an oiled board, because the paste will not adhere to the smooth surface. If the board is rubbed with sandpaper, so that it is somewhat roughened, this obstacle is overcome.

In speaking of the value of heavy paper well stretched, it was recommended as being the most convenient and giving the best results, with one exception. This exception is made in favor of what is called water color board, which consists of

water color paper smoothly mounted on very heavy white pasteboard. This may be obtained already prepared, in the usual varieties, at any art material shop. It comes in pieces twenty-two inches wide and thirty inches long, but is easily divided with a sharp knife into portions of the required size. If the student prefer, he can choose sheet paper and have it mounted to order in the same way; indeed, he must do this if he wishes to use a piece of board more than thirty inches long, for it is only sheet paper that comes in the extra large sizes. It is not advisable for a painter to mount his own paper, because he cannot do it so well as it is done by manufacturers, who have all the mechanical appurtenances for mounting paper properly, including large presses in which to dry it under immense weight. Moreover, the paper and pasteboard, if bought separately, cost almost or quite as much as the prepared board.

Water color board affords by far the most satisfactory surface upon which to work, for it never buckles, puffs, nor wrinkles, as even stretched paper does to a certain extent, and it therefore takes the color-washes with more exactitude and evenness. When the surface upon which paint is being washed does not remain flat, but is expanded by the water so as to form alternate swellings and depressions, the color is very apt to settle in the

hollows, with the result that when the paper is dry, the tint is not smooth and even, but is full of streaks and inequalities. The student is not recommended to use water color board at first, because, in the beginning of his work, he will spoil a great deal of paper, — that is a necessary part of his experience, — and the board, although not particularly costly, is too expensive to be wasted. After he has learned to manage color, and is sure that he is able to paint a fairly good copy of an art lithograph, or an attractive bit from nature, he will do well to adopt water color board entirely for his work.

For transient purposes, such as color-washing and small copying done simply for practice, the question of the quality of the paper is of no consequence; but paper that is to be used for permanent work, should be carefully chosen. Some sort of dressing or size always enters into the composition of water color paper, and in some makes, the dressing employed causes the paper to become discolored in course of time, and to turn yellow or brown, which is, of course, very undesirable.

It sometimes happens that a person beginning water color work has a quantity of ordinary drawing paper on hand, and fancies that it will answer for his first experiments with color. In this he

mistakes, for drawing paper is made expressly for perfectly dry use, such as pencil, crayon, chalk and charcoal work, and is of a spongy and absorbent quality that renders it unfit to take wet color properly. Water color paper should be chosen for water color work, drawing paper being reserved for the pencil sketching that it is always well to carry on in connection with painting.

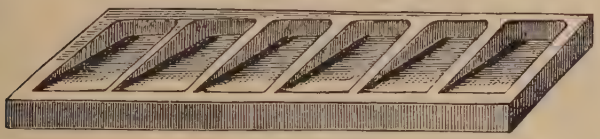
The additional materials necessary are not many, bulky, nor costly. As the drawing of a preliminary pencil outline is invariably the first step in making a water color picture, two lead-pencils will be required. It is a good plan to buy the best grade for art work, and to reserve them for that alone. They should be kept sharpened to a fine point, and should be discarded when they grow short, for nobody can draw freely and boldly with a short pencil. A decidedly hard quality, three H or four H, is required for Flower and Still Life outlines, and for indicating features and other small details of little Figures and Animals; but for general Figure work, and for blocking in Landscapes and Marines, a softer pencil is better, although it must not be smutty. An H will answer the purpose very well.

Regular drawing pencils are recommended instead of the cheaper, ordinary pencils, because the former are particularly smooth and even in qual-

ity, and it is possible to know beforehand just what sort of line each one will make, if it is properly sharpened. Cheap pencils, which are quite good enough for writing and business purposes, are often gritty, and the lead is sometimes hard and sometimes soft in the same individual. There should be no uncertainty when drawing for painting is in question, therefore these are to be avoided.

Erasers are, of course, needed, and they must not be hard ones, for in that case they would abrade the surface of the paper and make a flaw that would be obvious when color was washed over it. A piece of pure, black, india rubber, soft and pliable, is wanted for rubbing out small lead marks, and cleaning narrow spaces where it is not desirable to erase the surrounding lines. In addition to this, it is best to have a piece of sponge rubber, that is, rubber so treated that it is spongy and porous. This kind of eraser, which is exceedingly soft, may be rubbed over the face of a water color painting without causing any injury, provided that the color is dry; and it is useful when much lead is to be taken off at a time, and for removing any dinginess of appearance occasioned by pencil lines which show after the picture is finished. It always leaves crumbs upon the paper, which should be blown or brushed away.

A china slab, with depressions in it for holding color, is the next requisite. Students sometimes try to dispense with this, using the flat wing of the water color box and the inside of the cover, for the purpose; but a little color soon dries on a flat surface, where it is thinly spread out, and if a larger quantity is prepared, it runs off. The inside of the cover has not divisions enough, as a rule, and they are usually too broad and shallow, so that color placed in one division is apt to run over



Color Slab.

into the next, and mingle with what is there. There are several kinds of slabs, some with two, some with four, and some with six slanting compartments, while others have little hemispherical wells. These wells are hardly large enough and hardly far enough apart to hold the amount of wet color desirable for general use, therefore the slanting slabs are better; one having six divisions will be found convenient.

A glass for water will be needed, but an ordinary large tumbler will serve as well as a regular

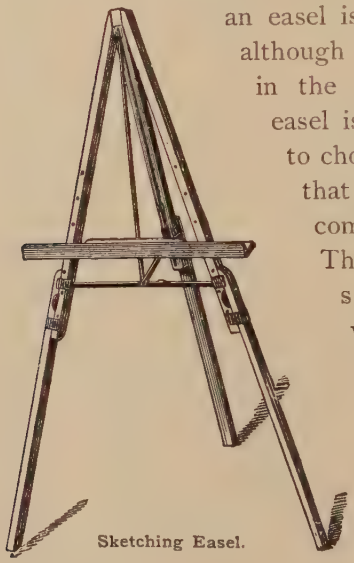
water colorist's glass, if the tumbler is smooth on the inside. Settlings of paint collect in any irregularities, and are difficult to remove. The glasses which are made expressly for water color work are of the same size all the way down, and are shorter than their diameter, so that they do not upset easily. They are provided with a lip on one side or both sides.

A sponge should be added to the outfit; a sponge that, before it is wet, is no larger than a small walnut. It must be very fine and soft, free from every trace of roughness, and of a triangular shape, so that it comes to a sharp point. Sponges exactly suited for the purpose are not easily found, and as a rule, the only way to secure one is to go to a pharmacy and look over the stock of eye-sponges, as they are designated. When a desirable one is obtained, it should be saved for delicate uses, such as wiping away small mistakes, taking out high lights, and removing extra color from the paper. A coarser, larger sponge will answer for washing the paint-box and slab — hard service that would soon spoil the finer one. Both sponges must, of course, be washed very often, paint never being allowed to remain in them, but they must be perfectly free from any vestige of soap or oil. A tiny fragment of sponge held firmly in the tip of a crayon holder is convenient for some purposes.

The next item on the list is a remarkable one, in that it costs absolutely nothing. It is a supply of large, clean, white rags, the older the better, so long as they are not full of holes. Pieces of an old sheet or of worn-out cotton underclothing, not starched, are exactly what is required. After muslin or cambric has been washed a great many times, it loses all traces of the dressing that was employed in its manufacture, and becomes soft and absorbent. New cotton cloth, even cheese-cloth, does not take up water instantaneously ; and a water colorist who keeps in his lap a new rag upon which to wipe the superfluous moisture from his brushes, will be reasonably sure to find that the water has run off upon his garments instead of soaking into the paint cloth.

Whether water color painting shall be done on an easel or an ordinary table, is decided entirely by convenience, habit, and personal fancy. For Flower painting, a table or other horizontal surface is, of course, required,

upon which the flowers may be arranged, and a place must always be provided for the color box, water glass, and other utensils; but the question of what shall hold the block or drawing-board is immaterial. In out-of-door work, an easel is generally employed, although the work may be held in the lap instead. If an easel is preferred, it is well to choose a small, light one that may be folded into a compact, portable shape. This will do for either studio or open-air work, as water color pictures do not require the large, substantial easels which are needed for the support of heavy oil canvases.



Sketching Easel.

Some sheets of white blotting-paper and a sharp penknife complete the list of materials. The blotting-paper is for occasional use in taking up paint, when too much has been put upon the paper. The knife is for sharpening pencils, and should be exercised frequently and conscientiously. Pencils

must always be sharp, and a knife must, therefore, always be at hand. A very small one that can be kept in the water color box, and is never separated from the rest of the outfit, is a very desirable institution; for an ordinary pocket-knife, that is used on all occasions and in all places, is often missing when it is most urgently needed.

A pair of scissors can hardly be said to belong properly to a stock of water color materials, but they will be found a great convenience in many ways.

As regards the general conditions of work, too much insistence cannot be laid upon the importance of a good light. A north light is, of course, best, because it suffers the least change during the day; but that cannot always be obtained by the amateur, who has no apartment specially set aside for painting, and is compelled to work in any room that happens to be free for the purpose. Whatever light he has, it should be clear and unobstructed, and he should never try to work in a cross light. If the room has windows on different sides, all except those on the preferred side should be darkened. The direct rays of the sun must not fall upon the paper, the study that is being copied, nor, generally speaking, upon the model or object that is being painted. There are pictures into which sunlight enters, it is true, but

they are not painted by amateurs nor beginners. The student would better reserve his attempts at sunlight effects for out-of-door work.

If the only light available is a southern one, all sunshine, it may be modified by lowering the window-shade, if it is made of dead-white holland, or by stretching a breadth of white cotton across the sash. This will make a diffused light by which it is not easy to work, but which is infinitely better than direct sunlight.

On very dark, cloudy days it is advisable not to work at all, as no clear view of colors and modeling can be obtained. Any attempt to paint at night is likewise quite useless, unless simple black-and-white sketches are made, for the actual nature of colors cannot be discerned by artificial light. If the student is anxious to work in the evening, he would better devote that time to the education of his sense of form, by means of quick sketching in pencil, pen-and-ink, or black paint. Good draughtsmanship produces in the artist a sense of power that nothing else can give, and it is something that should be assiduously cultivated.

Whatever the student is doing, — whether he is sketching or painting, copying or working from nature, — he should allow himself sufficient space so that his movements will not be cramped; and above all things, he should not hurry. Rapid work

is often good, but work done in haste never is. This may seem at first to be a distinction without a difference, but the difference is there, and is a very palpable one. An artist may paint rapidly, not because he has any anxiety to get through the work, but because his hand and eye and brain have been so accurately trained that they know at once exactly what is to be done, and perform their duty perfectly without an instant's hesitation. However speedily he works, speed is not the end he has in view; he is solely intent on making a good picture. On the contrary, to paint in a hurry is to put the idea of haste before that of artistic excellence. When the chief aim is to finish the work in hand, sufficient attention is not devoted to the means and methods employed. The man who paints carefully may work faster than the man who paints in haste, but nevertheless, the careful man does not hurry.

There is no advantage in working all the time, nor when very tired. The mind, eye, and hand need a respite occasionally, and will work the better for it. When the artistic perceptions have once been awakened, the process of learning goes on unconsciously. Even while the student is busied about other occupations, he involuntarily notes many truths of form and color, and effects of light and shade, and stores the memory of them away in

his mind without realizing it. This unconscious self-education provides him with some of the most important knowledge he possesses, and its value should never be overlooked.

FLOWERS, FRUIT, AND STILL LIFE

THERE is no branch of art in which it is possible to do good work without study and experience; but there is a great difference in difficulty between various branches, and the amateur is, as a rule, more successful in Flower, Fruit, and Still Life painting than in anything else, because these are the simplest, and require the least amount of knowledge. Of the three, Flower painting is the most difficult, because flowers alter more or less all the time that they are being painted, shifting their position, changing color, opening, closing, or wilting; while many kinds of fruit, and all still life remain exactly the same. By *still life* are meant glass, pottery, bric-a-brac, and other

manufactured articles. Vegetables and nuts may be considered as belonging to the same class as fruit, while fish and game are animals. Flowers are very frequently combined, in pictures, with still life and drapery, and the flower painter must, therefore, know how to paint the latter two, which will seem comparatively simple to him after he understands the former.

As was said in the Introduction, the instruction given here will be for painting flowers by means of moderately wet washes placed upon dry paper; a method that gives a more realistic, crisp effect than that of painting upon a continuously wet surface. The originals of all the little flower headings and tail-pieces in this book were painted upon dry paper.

In order to paint anything well, the artist must have a natural interest in that particular thing, and an appreciative sense of its characteristics. A man who really cares for flowers, and has observed them for their own sake, will paint them much better than a man who is indifferent to them. If, as was the case with Peter Bell, the Potter, —

> "A primrose by the river's brim
> A yellow primrose is to him,
> And it is nothing more,"

he will miss its individuality altogether, and therefore be unable to paint it properly. Flowers are as

individual as are human beings and animals. Each variety has its own peculiarities of growth, color, texture, form, and habit, and all such peculiarities require to be taken into consideration in painting. An understanding of these matters will not only enable an artist to paint flowers more sympathetically, but will prevent him from committing many solecisms. Probably there is no profession, business, or trade, of the real complexities of which any outsider has a true appreciation. It is like the smooth movement of well-ordered machinery, which seems simple and effortless to the observer, who has no inkling of the infinite number of screws, wheels, cogs, bands, rods, and pivots which hold it together and make it run perfectly. Practical experiment soon proves that there is more in all kinds of work than meets the eye. Even in Flower painting, which is generally acknowledged to be simpler than Figure, Animal, or Landscape painting, there is a great deal to be learned besides the mere technique of clear color-washes. Even when the student has the living flower before his eyes, he must have also a mental appreciation of its texture and peculiarities. If he sees a shining high light, such as appears in a poppy, he must be able to account for it to himself by his knowledge of the flower's characteristically thin and silky texture. A poppy petal is more fragile and

delicate than a butterfly's wing, and takes the light in quite a different way from the petal of a pansy, for example, which is velvety, and comparatively thick. If the student confined himself to roses alone, he would have a great deal to learn as to their diversity of form and habit. In some varieties, the thorns are red, in others brown, in others green. In some cases they bend downward toward the root, in others the point is directed upward toward the flower. The Bride rose, and also the Bridesmaid, have long, pointed buds, and the petals recurve very little, while the foliage has a dull surface. The flower of the Pearl of the Garden, on the contrary, is short, round, and compact, the outer petals curve somewhat, and the leaves are peculiarly waxy, having usually red stems. The petals of La France roses curl back so excessively that the flower, when open, is all acute angles. It is unnecessary to give an exhaustive list of the different sorts of roses and their special traits, because the pupil ought to study out this knowledge for himself. The names cited have only been mentioned as characteristic examples.

Some sorts of flowers are much more difficult to paint than others. Roses are by many persons believed to offer more obstacles to successful work than anything else, but they are no more difficult

than double violets, carnations, trumpet daffodils or chrysanthemums, while orchids and spotted lilies, such as the Roseum and Rubrum, are much more troublesome. The beginner should, of course, choose for his model something comparatively easy to paint, in making his first attempt from nature, and among such simpler flowers may be reckoned pansies, white narcissus, Easter lilies, tulips, sweet peas, wild roses, and single hollyhocks. All small flowers growing in multitudinous clusters, like lilacs, heliotrope, hydrangea, and snowballs (Guelder rose), are hard to manage, and should only be attempted by students who have had experience with less complex subjects.

Yellow and pink flowers require more practice than those of other tints; not because these flowers are in themselves so different, but because it happens that yellow and pink pigments are composed of materials which are less easily controlled than those which enter into the make-up of other colors. Both yellow and pink are peculiarly sensitive, and will bear no bungling treatment, becoming muddy at once under unaccustomed hands. Greens are likewise troublesome, but blues, purples, and reds are comparatively easy to manage, as is white also, where no body color is employed; for the untouched paper itself supplies the white, and only the shadows, reflections, and yellow lights shining through, are to be painted.

It is taken for granted that the pupil has copied many good flower studies before trying to work from nature, and that he has a fair understanding of floral drawing and anatomy. He should, however, by no means assume that his copying days are over when once he begins to work from real flowers; because if he wants to overcome difficulties in the easiest way, he will always, before attempting to paint a new flower from nature, find a good water color facsimile of it and copy that. Copying is, no doubt, less interesting than study from nature, but it is exceedingly helpful.

In making the preliminary pencil sketch of a flower subject, care should be taken to preserve the individuality of the separate flowers. If the model is a spray of wild roses, for example, each petal should be drawn by itself, instead of the general outline of the flower being drawn, and afterward divided off into petals. It is also necessary to accurately define the limits of the middle. In all flowers, the centre is the important point, as far as construction is concerned. It is what holds everything together and gives oneness, even in monopetalous flowers; and to be vague and indefinite there, is to weaken the entire effect, no matter how well the coloring and general appearance may be rendered. The stamens and pistil are obvious in the middle of many flowers, but even

where they do not show, as in a very double chrysanthemum, there is an evident centripetal tendency, and the shadows are sharper and deeper in the middle than elsewhere. In a pansy, there are two little white, yellow, or greenish velvety bars, which form an angle at the centre, and which should never be ignored in a picture, because they are characteristic of the flower. It is usually best to begin sketching a flower in the middle, as that is the really important part, from an anatomical point of view, and the starting-point from which the flower radiates and expands. Moreover, if any mistake is afterward made, it will involve alteration only of the particular place where the error occurs; whereas, if the sketch is begun at the outside and carried inward, one change will be extremely apt to necessitate others, and possibly the whole drawing will have to be erased and made afresh, which is a waste of time and energy. The sketch should be very light and delicate, consisting of a single thin outline. Double and triple lines are to be avoided. If corrections are necessary, all false marks should be carefully erased and every trace of them removed. It should be recollected that no heaviness of outline is to be tolerated, and that it is quite as bad to press the point of the pencil into the surface of the paper, so that it leaves a sharp groove, as it is to make a strong

black mark; for the groove will show as a distinct line in the picture, and nothing can obliterate it. The real purpose of the outline is merely to guide the brush. After a sufficient number of color-washes have been put in to place the anatomy of the subject beyond chance of confusion, the painting should be allowed to become perfectly dry, and all the lead-pencillings should be taken out with a sponge rubber. The custom of blocking in the general outlines before perfecting the drawing, as is done in most other branches of art, must here be abandoned, because the paper must be kept as free as possible from graphite. The utmost endeavor should be made to place no unnecessary mark upon the surface, and to have the drawing exact from the beginning.

Instead of choosing a large cluster of flowers and leaves for his model in his first attempt at working from nature, the student would better take one detached flower or leaf and devote his attention to that, making a simple study of color and form, instead of attempting to produce a complete picture. Leaves will be found to be much more difficult than flowers, and will require greater application and knowledge, and are therefore frequently to be taken for practice. Few flower pictures can be made without the introduction of leaves, and these ought to be as skilfully painted as the flow-

ers themselves, else they are a blemish, and lower the artistic value of the entire work.

Only flowers in good condition should be selected. Those which have begun to wither, or are defective, are not desirable. Moreover, unless flowers are freshly cut, they are liable to fade at any moment, and leave the student at a loss. It often happens that the representation of one worm-eaten leaf or petal has a good effect, but it should always be subordinate, and not be made a principal feature in the picture. Fresh flowers, fine in form and color, are required, if satisfactory work is to be done, and they should be kept in as good condition as possible, by frequent spraying with cold water. An atomizer may be employed for this purpose, or water may be sprinkled on them from a sponge. When a detached bunch of flowers is being painted, without foreground or still life, the cluster is, of course, supported by placing the stems in a jar or bottle in which there is water. Likewise, if the flowers are to be combined with still life, and are in a bowl or vase, this is filled with water, so that the flowers are kept alive. It sometimes happens, however, that it is desired to represent them as lying loosely upon a table, or falling out of a basket; in which case it is much more difficult to prevent them from withering, as the stalks cannot then be kept in water. A large

tray is of great assistance in such a case. Several thicknesses of cloth or soft paper are placed in the tray, enough water is poured on them to wet them thoroughly, and the flowers are then laid upon the cloth or paper. The coolness and moisture will allow them to remain fresh much longer than if they were arranged upon a dry surface. A bit of cotton wool saturated with water and wrapped around the end of each stem will also aid to keep them from wilting.

When flowers are scarce, it is possible to obtain a large amount of practice from one or two specimens by turning them around and painting the same flower in different aspects. One rose may thus serve as a model for a full front, three-quarters, side, and back view, while a single leaf may be changed about in the same way, so that the student sees first the right and then the wrong side. When these studies of detached flowers and leaves turn out well, it is advisable to keep them for future reference; for if the student ever has to supply part of the details of a picture from memory, such memoranda will be found useful.

As has been already said, flowers and leaves change very rapidly. Most persons whose attention has never been drawn to the matter, fancy that a cluster of flowers placed in a vase full of water, undergoes no alteration until it begins to

wither. On the contrary, it is shifting and changing continually. The flower heads turn on their stems, droop down, straighten up, expand, or partly close. The leaves vary their position, and sometimes grow. These movements are often so gradual as to be invisible, as movements, but their effect is but too evident to an artist who is working from the flowers. Frequently, when he is ready to paint, the appearance of his models differs noticeably from that which they presented when he began to sketch them. Some varieties of flowers are much more variable than others. Nasturtiums and hothouse violets change so rapidly that their motion can be observed, while orchids and Easter lilies remain practically stationary. These alterations are due partly to the impulse of growth, and partly to the influence of light, which always attracts flowers to turn toward it, however they may be arranged originally. Because of these changes, it is almost impossible to paint a large study of flowers all at once. By the time the entire composition is drawn in pencil, those flowers and leaves first sketched have taken a new position, and the outline, lights, and shadows are entirely different. For this reason it is best, in planning a large flower picture, to sketch only the principal group, and paint the flowers and leaves composing it before they have time to change a great deal.

The subordinate parts can be added after the main features have been thus secured, changes in the more distant portions being of less importance.

Mention has previously been made of the desirability of carrying on a picture all together, and the advice just given is by no means to be taken as a contradiction of that earlier advice. It is very much better to draw in the whole composition at once, and keep every part of it in the same stage of advance, when such a course is possible. When it is not possible, the plan of painting the principal group first, is the only resource. For example, if an artist wishes to make a picture of a jar full of roses, with more roses scattered around the jar upon the table where it stands, he cannot pose all the roses at once, because with so many flowers, some will have time to wither before the picture is finished. Therefore he paints first the roses in the jar, because they are the main feature of his composition ; afterward arranging the roses which he wants upon the table, and painting those. In such a case the jar, although sketched in at the beginning in order that the general dimensions and proportions of the picture may be fixed, is painted last, not only because it is of secondary importance, but because it will not alter in any respect.

When flowers are below the average size of

the species to which they belong, they should be drawn a little larger than they really are, so that they appear to be fair specimens, otherwise they will make a characterless and unattractive picture. Very small kinds of flowers, like the tiny wild violet, for instance, or the spring beauty, are not suitable for ordinary painting, as their minuteness and detail are their only charm, and these qualities are not pictorial. They may, perhaps, answer for the decoration of menu cards, and they lend themselves well to conventionalization for use in designing, but are too insignificant to be good subjects for a picture, and the student will learn nothing by attempting to paint them.

The coloring of most flowers is exceedingly pure and brilliant; so much so, that in the entire gamut of pigments there is none that does not seem flat and dull when compared with the tints of nature. For this reason, the student need never hesitate to employ the most vivid colors in his paint-box, and those of the clearest and liveliest quality; for even when the subject he has chosen is delicate in tint, what color there is, however pale, must not lose the essential characteristics of warmth, transparency, and brilliance.

In the list of paints recommended, yellows are well represented, and of the five mentioned, Aureolin is by far the most bright and luminous, although

it is not the deepest. It is remarkably brilliant and pure in tone, being absolutely free from any trace of red or brown, and is, therefore, the best yellow to employ, either alone or in combination, for painting yellow flowers. Light washes of Aureolin are also serviceable in representing the warm tone of light shining through leaves and petals, because of its before-mentioned luminous quality.

The Cadmiums come next to Aureolin in point of vividness, but lack its vitality. Even Pale Cadmium has a tinge of red in it, while Orange Cadmium is, as its name denotes, of a strong orange hue. Any tendency to red or brown in a yellow, causes its washes to look rather dead when they are dry, and for this reason it is advisable always to mix a little Aureolin with the Cadmiums, even for painting orange-colored flowers. The addition of Aureolin gives the deeper yellows a life and vivacity which they do not inherently possess. These three yellows, in different combinations and degrees of strength, will answer for painting all yellow flowers, and an immense variety of tints may be obtained with them. They are too bright for use in still life associated with flowers. They wash well, separately or mixed with one another, but do not always blend smoothly with blues, greens, and browns.

Indian Yellow is one of the most valuable colors

made. It is not brilliant, but is extremely deep, warm, and rich in tone, washes admirably, and combines perfectly with other colors. While it is not vivid enough to represent the yellow of flowers, it sometimes answers for the deep touches in the middle; but its chief uses are to supply the yellow element in mixed greens, to warm heavy cast shadows, and to enter into the composition of background washes.

Yellow Ochre is an opaque, earthy yellow, too dull for flowers and leaves, but useful for still life and backgrounds — mixed with something else, of course, for the latter.

Of the two greens, neither is used pure. Hooker's Green No. 2 is sometimes employed in leaves, but is combined with other colors for the purpose, being too crude by itself. Its chief value is as an element in the shadow tones for yellow flowers, although it is also used in still life. Emerald Green, likewise, is mainly of service in mixing certain shadow tints, and is an unpleasant color to handle, except it be employed alone, as in landscape work. Only the value of colors in Flower painting is now being considered, however.

Indigo is rather dead in tone, but is valuable for mixed greens, and for use in backgrounds. It also serves to moderate the brilliancy of brighter blues in the shadows of blue flowers.

Prussian Blue is more lively than Indigo, and gives brighter mixed greens. It washes well, and is much employed in backgrounds and still life, in combination with other colors. On account of its greenish tinge, it does not make clear mixed purples, the green counteracting the red of the other element, and giving a dull, dead color. Both Indigo and Prussian Blue are exceedingly strong pigments, and a little of them goes a great way. For this reason, in using them for mixed tints, it is best to add only a little at a time, very cautiously, otherwise they will overpower the color with which they are combined.

New Blue and French Blue are fine, bright, and pure, and are suitable for painting blue flowers. French Blue has a slight tinge of red, and is therefore well adapted to the making of mixed purples. These two colors are too bright for use in mixing leaf greens or for backgrounds, although they are sometimes required for still life, such as blue china.

Permanent Violet is a clear violet, as is indicated by its name. It gives beautiful pale and bright purple tones, much clearer than can be obtained with a mixed purple, but yields no deep shades. It is very valuable for painting the most vivid parts of such flowers as the violet, purple iris, pansy, and clematis.

Purple Madder is a thick, rich color, almost

black in the darkest tones. The light washes are dead, and are seldom used, except for dull purplish stems and twigs, but the strong ones are admirable for the warm, deep shadows of some richly colored varieties of flowers and fruit.

Rose Madder is the only lively pink pigment obtainable. All others are comparatively dull or weak, even Carmine, the brightest of reds, appearing dead in the pink washes. It is unfortunate that Rose Madder is the sole resource, because it is a most disagreeable color to handle. It is gummy, and requires to be mixed in the water with especial care before it will wash smoothly, and must be used with great deftness, else it becomes muddy. It is used for pink flowers, for which no other paint will answer.

Light Red is too dull for flowers themselves, but is valuable in still life, background and foreground mixtures, and shadows. The same may be said of Indian Red.

Carmine is a most beautiful red, entirely free from brown or yellow. It washes perfectly, but is used mainly in its deeper shades, because, although when employed of full strength it is peculiarly fiery and luminous, the weak tints are entirely devoid of any such characteristics. It is the only color suitable for painting red flowers, although Vermilion is sometimes used for this

purpose. Vermilion is, however, omitted from the list, because it is a heavy, opaque color, without any element of life or brilliancy. Carmine mixed with Orange Cadmium will give a vermilion tint, but very much brighter and warmer than can be obtained with Vermilion itself. Carmine is also employed as one of the elements in mixed purples.

Burnt Carmine is similar in character to Purple Madder, but is valuable in its medium as well as in its dark tones, the middle tints serving for such crimson flowers as are not especially vivid. It yields beautifully smooth washes.

Burnt Sienna is used in mixed greens, in bright brown stems, in background and foreground mixtures, and in still life. It is also sometimes employed in minute quantities in the middle of flowers.

Brown Ochre is an earthy color, and is confined to backgrounds, foregrounds, and still life.

Raw Umber and Burnt Umber will seldom be required in Flower painting.

Vandyke Brown is useful for stems, still life, and backgrounds, and occasionally for stamens.

Brown Madder is similar in character and use to Purple Madder, but is redder.

Sepia is employed for mixed flower shadows, for foregrounds, backgrounds, and strong cast shadows. It is rather inky in its strong tones, and requires

to be handled with discretion, to keep it from settling and appearing dense and heavy.

Chinese White is a perfectly opaque white pigment, which should seldom be used, and then only in infinitesimal quantities. When it is needed at all, nothing else will answer. It serves to indicate points of high light so minute that it is impossible to paint around them and leave them represented by the white paper, and is required only in the immediate foreground objects.

The student of course understands that only a few of the characteristics of the colors referred to have been touched upon in the foregoing description. An exhaustive review of the possible variations and combinations cannot be given, for their name is legion, and a knowledge of them is to be derived only from study and experiment. On general principles it may be said, that wherever pure color can be used, it is best to use it, as mixed color is never quite as clear and brilliant as pure color. For example, if violets are the subject chosen, and they happen to be really a trifle bluer in tone than Permanent Violet, it is nevertheless advisable to employ the latter color quite pure, for their local tint, as an admixture of blue will give a tone much duller and deader than the violets actually have. Where the variation of color is decided, however, such a liberty is not permissible.

In a flower picture, the flowers are naturally the chief consideration. Leaves, while almost always essential, — there are only a few varieties of flowers which make a pleasing picture without their leaves, — are, nevertheless, of secondary importance, while the still life, if any be introduced, is still more subordinate. Mention has already been made of the necessity for keeping flowers very vivid and clear in tint, purity and brilliance of color being their natural characteristics; and of the inadequacy, in themselves, of even the brightest pigments to render this purity and brilliance. If an artist in any line of work had to rely solely on the positive value of his colors, he would despair of ever being able to produce an intelligible picture. He therefore calls to his assistance a very powerful natural law, — the law of contrast, — and by its aid, secures effects of brightness and luminosity which are not properties of the actual colors employed. For instance, if he paints a bright yellow pansy, even though he uses the most brilliant yellow paints he can obtain, his color still falls short of nature in vividness and fire; but if he paints a dark purple pansy behind the yellow one, so that the two are seen in juxtaposition, the yellow pansy at once appears much livelier and clearer in tone. This is because he has made use of two kinds of contrast, — a contrast of color, and

a contrast of light and darkness, — and by contrast the value of each of the two elements is greatly increased

The question of complementary colors is here involved, and as it is possible that there are some students who do not understand this matter, an explanation is given. Colors, in the abstract, are divided into two great classes, called, respectively, primary and secondary — the tertiary colors need not be spoken of, as they are of comparatively little importance. The primary colors are those which are not made up of separate elements into which they may be analyzed, but are individual and complete. They are *red*, *yellow*, and *blue*, and it is of rays of these three colors that white light is composed. The secondary colors are *green*, *orange*, and *purple*, each consisting of a combination of two of the primary colors. Thus *green* is made of *yellow* and *blue*; *orange* is made of *red* and *yellow*; *purple* is made of *red* and *blue*. Complementary colors are those two so related that one makes up to the other what is lacking for the production of white light. Thus it will be seen that two primary colors cannot be complementary to each other, because taken together they do not include all the elements of white light. Neither are two secondary colors complementary to each other, because they are so proportioned that taken

together they compose a tertiary color instead of white. A primary and a secondary color can be complementary to each other, however, and are so when the secondary color supplies the other two primary colors. *Purple* is complementary to *yellow*, because it is composed of *red* and *blue*, the remaining primary colors; *green* is complementary to *red*, because it is composed of *yellow* and *blue*; *orange* is complementary to *blue*, because it is composed of *red* and *yellow*. When complementary colors are placed side by side, the most powerful color contrast possible is established, and by their mutual influence, the apparent brilliancy of each is redoubled. With actual pigments, the limitations are such that two primary colors do not invariably produce a true secondary color. For example, Light Red and New Blue, in combination, make gray, not purple; and it is hardly necessary to say that red, yellow, and blue paint mixed together do not make white. This is due, not to any lapse of the abstract natural law, but to material causes.

The force of contrast, therefore, being the strongest influence that an artist can bring into play for giving value to his work, it remains to decide how he may best turn that force to good purpose. In whatever part of a picture the strongest contrast is established, there will the eye of the observer be irresistibly attracted, and that part

will assume the most importance. Thus it follows that whatever the artist wants to make the chief feature of his picture, he must bring into contrast with the rest, rendering it more brilliant in color, and definite in form and detail, so that the observer looks at it perforce. In a flower picture, the flowers must be made conspicuous by keeping the leaves and still life rather quiet in tone. By subduing the greens of the foliage, the value of the flowers is enhanced, so it is advisable never to paint the leaves in a high key of color. As for the still life, if there is any in the picture, it is simply accessory, and must be kept rigorously in its place, and not permitted to rival the flowers and attract attention to itself by exhibiting either vividness of tint or sharply defined contrasts. Still life painted alone is quite a different matter, and will be spoken of later. That employed as accessory in flower pictures, should be carefully chosen with a view to the purpose it is to fulfil. It is often serviceable as a means of suggesting variety of tone, and of introducing some color that will set off the tint of the flowers advantageously, but its color must be subdued, not aggressive. For instance, a cluster of pink roses in a blue bowl makes a charming picture, but the blue of the bowl must be nowhere near so bright for blue, as the pink of the roses is for pink, other-

wise the bowl rivals the flowers in value, and the latter sink into comparative unimportance, when they should be the first consideration. It is in a case like this, that a knowledge of the qualities of different paints is found useful, for the artist who has such knowledge, reserves his brilliant pigments for flowers, and his dull ones for still life, making use of their inherent characteristics to gain the effects he desires. As an illustration may be cited the example of purple violets in a yellow vase, a subject that is favored by many painters. The color-scheme is, of course, founded on the fact that yellow and purple are complementary, and the yellow of the vase is meant to increase the value of the violets ; but the success of the idea depends entirely upon the way in which it is carried out. If the vase be painted with Aureolin or the Cadmiums, these paints are so much more brilliant in quality than is any purple than can be employed, that the flowers are rendered of secondary importance, and the eye is attracted by the vase to the neglect of the real subject of the picture, the color of the flowers serving rather as a set-off to the still life, than the color of the still life adding value to that of the flowers. On the other hand, if Yellow Ochre and Brown Ochre are used for the vase, these pigments are so dull in quality that, while they serve the

purpose of suggesting the complementary color, they offer no rivalry, and the violets derive the desired advantage from the association.

The management of backgrounds is something that usually gives the student a great deal of trouble. He finds difficulty in deciding what color he shall employ, and what depth of tone. It is, of course, impossible to give minute and exact directions, because each picture demands a background suited to its own individual peculiarities. Certain artists always use as a background a dull tone of the complementary color of the flowers in the picture, while others allow the background to suggest a repetition of colors already seen in the subject. This is entirely a matter of personal preference. In the author's opinion, a complementary background is rather crude and staring in effect (except when it is green), and is apt to come forward and assert itself, thus flattening the picture, and making it lack depth; while a background repeating the tone of the subject, takes away from the value of its coloring. Non-committal backgrounds, such as gray, dull green, and olive, are nearly always satisfactory and artistic, and will harmonize with everything. An atmospheric blue, without brilliancy, is sometimes pleasing as a background for white or pink flowers, but should be kept of a subdued quality, no matter how dark it may be.

A bright, frank tone employed as a background kills the effect of the flowers and leaves, and robs the picture of atmosphere, and is to be invariably avoided.

For light flowers, a background of medium depth of tint is best. It must not be too dark, because it then lessens the value of the shadows in the flowers and foliage, and makes them look bleached and weak; and it must not be too pale, because it then offers so little contrast to the flowers that they are not brought into relief. For the latter reason — the lack of contrast — a dark background should never be used for dark flowers.

The attractiveness of a picture is often increased by a graduated background, left quite pale and delicate at one side of the picture, but increasing in depth of color as it approaches the other. Just how the color shall be distributed, depends upon the composition of the picture.

A background can seldom be put in with one wash of color. Usually it is purposely more or less clouded, and these graduated tints are given by means of successive washes, each one allowed to dry before the next deeper one is added. The paper should be moistened with clean water where the wash is to be begun, that the color may fade off delicately, instead of having a sharp edge. The color is used much wetter for foregrounds and

backgrounds than for flowers and leaves, and is often allowed to run on the paper; but it must be carefully guided around the outline of the subject, in order to keep the latter clear, and it must not be allowed to stand and settle. It is better to begin at the outside and carry the background color toward the subject, than to work from the subject outward. If a very dark background is desired, it may be more satisfactorily obtained by seven or eight successive washes, than by laying on very heavy color once or twice.

The background cannot, of course, be put in until the entire composition is definitely established on the paper. The first background wash may be laid on when the picture is about half finished, and afterward the background may be darkened as much as proves to be necessary for giving the proper effect to the completed picture.

The word *foreground* is used in two ways. It designates the locality in a picture that seems to be nearest to the observer, and thus a flower or leaf is said to be in the foreground when it appears to be in advance of the others, and to come closer to the eye. "Foreground" is also a specific name for the horizontal plane of a picture, which begins at the lower edge and goes back in perspective. Many flower pictures do not have a foreground, in this sense. They may consist only of a branch or

cluster of flowers, which is not represented as resting upon anything, or the flowers may be in a vase of which only the upper part is seen. When the horizontal plane is shown, it should differ somewhat in color or depth of tone from the background, otherwise it will seem to be simply a continuation of the latter, and the idea that it is solid and horizontal will not be fully conveyed. It is often desirable to have the junction of the background and foreground indicated by a perceptible horizon line, which should be perfectly level, but not so sharply defined as to look hard. There is the same reason for not employing highly colored foregrounds as for avoiding brilliant backgrounds; that is, they distract attention from the flowers, and make the latter seem dull and insignificant. Gray and brownish tones are suitable for foregrounds; and an excellent effect is often obtained by washing in a few indistinct reflections of the leaves and flowers, in which their colors are repeated in a lower key.

It must be noted that objects lying or standing upon the foreground, cast more or less strong shadows on it, and it is by the proper representation of these shadows in the picture, that such objects are held down, and made to appear as if they are really lying or standing on a level surface, not floating in the air. A cast shadow is always strongest

nearest the object casting it, and diminishes in depth as it recedes from the object. Foreground shadows may be rendered in a picture by grayish or brownish tones, and a faint suggestion of yellow may be washed over them afterward, to give them warmth and transparency. When one flower or leaf casts a shadow upon another, the shadow color is used that is employed in the ordinary shading of that flower or leaf.

Reference has been made to the fact that a color appears brighter when it is contrasted with a duller or decidedly darker tone, and also when a suggestion of the complementary color is introduced; and that whenever a strong contrast is thus established in any part of a picture, that part seems to come forward and be more prominent and conspicuous than the rest. The artist takes advantage of this circumstance to give his group roundness and perspective. If he is painting a cluster of flowers and foliage, he will make those flowers and leaves which are in front, the most vivid in color, will work them up in detail, and will concentrate all his sharp contrasts there, in order to fix their foreground position more thoroughly. In the flowers and leaves at the sides of the group, he will have less brilliancy and contrast, thus allowing them to seem to recede naturally from the eye, since it is not specially attracted

to them. For the most distant portions of the group, — those which appear to be behind all the rest, — he will use much duller color, and keep them somewhat indefinite, thus aiding the impression that they are comparatively far away. Distance, with actual objects, has the power of subduing bright tones and obscuring detail, therefore effects of distance in pictures are obtained by lowering the key of color, and omitting detail altogether.

Just how much, and in what manner, color is modified in a painting to give the feeling of distance, will be determined by the way the light falls, and the sort of background that is employed. Those flowers and leaves which the artist wishes to represent as farthest from the eye, he usually makes of a tone that approaches the color of the background, in order that they may not contrast with it (in which case they would stand out aggressively and attract too much attention), but may appear to be vague by reason of their removed position. When the light falls in such a way that the group has a light and a dark side, the distant flowers on the light side are treated in a different fashion from the distant flowers on the dark side. As an illustration, suppose the group in question to be a bunch of violets. Those violets in the immediate front of the bunch, close to

the eye, are made as bright as possible, and some of the details are suggested, the lights and shadows being contrasted strongly enough to throw the flowers into relief and make them seem to come forward. As the flowers on the light side of the group recede from the eye, detail and contrast are gradually omitted, but a clear violet color is still employed for them, because, as they are on the side toward the light, they continue to receive it, however far away they may be. If the background is light, they are made paler, in order to prevent them from contrasting strongly with it, as has been explained. If the background is dark, they retain their depth of tone, for the same reason. On the dark side of the group, however, the violets are not only deprived of detail and contrast, but are painted with a much duller purple, and in the farthest distance, sometimes lose their individuality altogether, becoming merely shadowy suggestions of flowers.

The general principles of the coloring of a flower picture, as a whole, having been given, the method of treating individual flowers may now be considered.

The high lights of a flower are really lighter than any other part of it, but they are not white unless the flower is white. If the petals have a glossy surface, as is the case with poppies and

buttercups, the high lights will be much lighter in comparison with the actual local color, than is the case with flowers having a dull or velvety surface, like red roses or pansies; but in all colored flowers the high lights, however light they may appear to be, have, nevertheless, a more or less strong tinge of color. In a pink rose, for example, the high lights are pink; in a jonquil they are bright yellow. They obtain their value, as high lights, by contrast with the rest of the flower, which is deeper in tone.

The majority of the shadows in a colored flower are not gray, but partake of the local color. Citing a pink rose again, if it is carefully regarded, the high lights will be found to appear lighter than the actual tone of the petals where they are seen, and the parts which seem next deeper in tint will be apt to show the real local color of the rose; while the shadows in the curves of the petals, and between the petals, are more often an intensified pink than a gray. In the middle of the rose, the small, deep shadows will be actually red. What gray shadows there are, will be found chiefly on the dark side of the flower, from which light, either direct or shining through petals, is entirely cut off. Thus it will be seen that flowers require to be shaded mainly with their own color, instead of with gray; not that grays are not essential to the proper

representation of the flower, but they must be used with discrimination. If the picture of a colored flower be shaded entirely with gray, it will have no warmth nor life, and will, therefore, not look like the real object ; for flowers are never cold nor dead in appearance, no matter what their color may be. The best general advice that can be given on this point, is that a flower should be shaded on the light side, and in the middle, with variations of the local color, which should also be used on the dark side, in places where warm shadows are obviously required ; gray being employed for the less definite shadows on the dark side.

In painting white flowers, the white paper is left untouched to represent the high lights, the shadows being rendered by gray, except those in the middle, which usually have a yellow glow. Reflected lights on a green leaf or pure white flower, or light shining through it, are always golden in tone, while in colored flowers, such lights appear as a warmer and more intense shade of the local tint. The shadows in the heart of any sort of a pictured flower should always be kept very warm, otherwise it will look dull and blighted. In fact, all warm tones to be discerned in the model, should be made the most of in the picture, as far as can conscientiously be done.

It has been said that the foreground flowers of

a group should be brought forward toward the eye by means of "working them up" to a greater extent, that is, by means of putting in more detail of form, light, and shadow. The details most effective in making a flower stand out, are the very small, sharp shadows caused by irregularities in the edges of the petals; the exceedingly strong, dark touches of color seen in the centre of double flowers like roses, hollyhocks, and chrysanthemums; and individual stamens, both dark and light, like those found in dogwood or fruit blossoms. Such details should only be used in the foreground, because they would naturally be most obvious in the flowers nearest the eye, and to put them in flowers which are meant to seem farther away, is to destroy the effect of distance. For example, in painting a branch of dogwood blossoms, the two or three flowers in front may be allowed to display indications of some of the individual florets in the round, yellowish centre; but in the more distant blossoms, the florets should be omitted, and only the general shape, color, and texture of the middle should be shown. The small, sharp shadows, mentioned as appearing in foreground flowers, are called accents, and are to be confined chiefly to the light side of the flower. In some colored flowers, jonquils, for instance, they are more effective when gray is used for them

than when they are painted in the warm tone, and as they are very little, the gray does not deaden the general color of the flower. It is never advisable to indicate many details, even in the nearest flower, as breadth and strength are lost by minute attention to trifles; but what details are put in, should be placed where they will tell, and will give the desired aspect of roundness and reality.

Each sort of flower has its own peculiarities of structure and texture. The structure is largely indicated by the drawing, but not altogether. Take, for example, an Easter lily. It has six petals, which grow in two sets of three, one set inside the other. The three inside petals are wider than the three which are outside, and are additionally distinguished by having two lengthwise ribs. The way that the petals grow, and their respective size, are shown by the preliminary sketch; but the sketch does not show these ribs, because their existence is indicated on the actual flower only by lines of shadow. The inexperienced student who paints a lily, invariably commits the mistake of bringing these ribs into undue prominence by making the lines of shadow evident throughout the whole length of the petal. It is true that they do extend thus on the actual petal, but he only notices it when he rivets his attention upon that one particular part of the lily; the fact is not at

all obvious when he regards the flower as a whole, or as one of a group. If he gives a mere suggestion of the rib shadows at that place on the petal where they happen to be strongest, he will obtain a much more truthful and artistic effect.

This point of suggestion is worthy of consideration. The eye, if it receives a hint of an idea, properly conveyed, has a peculiar faculty of following out that idea without further aid ; and it is well to take advantage of this fact in painting a picture, and to suggest details rather than to definitely and completely map them out. A simple hint of the structural peculiarity of the lily petal just mentioned, will be sufficient to inform the eye that the ribs are there. In the Introduction, the student is advised to omit from his picture everything that is not necessary to make it appear rational and truthful. Particularization is not necessary, when a suggestion will convey the thought perfectly, therefore only such detail should be employed as is essential to an understanding of the subject.

The texture of a flower is shown by the shape and character of the shadows, and also, to a certain extent, by the edges of the petals. In a glossy, brittle flower, like the lily, the shadows are sharp and crisp, while in a rose they are softer and more indefinite. The edges of the petals of thick, leathery flowers, like the calla lily, are

smooth, while the edges of the petals of thin, delicate flowers, like the poppy, are often irregular or fluted. These are mentioned simply as illustrations. Each kind of flower has its own texture, which must not be overlooked, else the character is lost.

Flowers which are spotted or mottled with strongly contrasting color, require special mention, because of the tendency that all spots have to become unduly evident in a picture. Everybody, probably, has noticed with how startling force a spotted gown comes out in a photograph; and the same effect is produced in a picture of a spotted flower, if the spots are painted of as deep a color as they are in nature. They at once assume enormous importance, and come forward with such violence that they do not seem to belong to the flower at all, but to be hanging in front of it — an aspect quite different from that presented by the real spots upon the real flower. The only way to make mottlings retain their natural place and value in a picture, is to paint them very much paler than they actually are, and to blur their edges a little. This is one of the cases when, if the artist tries to tell the exact, positive truth, it has the effect of absurd exaggeration; therefore he must only delicately insinuate it, if he wishes to hold to the artistic verities.

While this rule holds good with regard to all

freckled flowers, like Japanese lilies, field lilies, foxgloves, and cypripediums, it is not applicable to flowers in which the petals are marked with one large, distinct blotch, as is the case with pansies and nasturtiums. In a picture of such flowers as these, the blotches of the foreground individuals may be rendered with the actual depth of color.

What has been said of flowers, is true also of leaves, although the latter will be found more difficult to paint well. High lights and accents are to be confined to those in the foreground, while for those in the background, bright tones and sharp contrasts are to be avoided. Leaves which have a smooth surface possess one trait worthy of particular notice; that is, that whatever the local color of the leaf may be, even if it is a very yellow green, the high lights will have a bluish tone. If they are not thus rendered in the picture, the effect will not be natural.

Gray washes are not used in shading leaves. The shadows are given by darker greens, and it may be mentioned at once, that the darker a green shadow is, the warmer it should be. By a *warm* green is meant one that is tinged with yellow or brown. Wherever green shadows are very deep, as among the stems of a bunch of flowers, they should be represented as having a yellow glow, or they will seem like a solid green substance, in-

stead of being mysterious and atmospheric. This is true even when the local color of the stems and leaves is blue green. If the student cannot perceive it at first, he must work on faith until his eye becomes trained to an appreciation of it.

All that has been said in the foregoing part of this chapter, applies equally well to Flower painting in any method, wet or dry, and much of it is true also with respect to Landscape and Figure painting; but general directions will now be given for working on dry paper, and as these directions are for the help of beginners and amateurs, they will be systematized as far as may be. It is, of course, not possible to condense art instruction into a set of rules, by following which the student will automatically produce a good picture; but it is quite possible to impart such knowledge of the mechanical handling of color, and the method of carrying on a picture, as has been derived from study and experience, and is therefore known to be practical. If a certain effect can be easily and satisfactorily obtained by doing a certain thing, or using a certain color, there is no reason why the student should not be made aware of the fact.

In painting on dry paper, the palest wash is first put in, and work is carried on gradually from the light tones to the dark, and from the warm shadows to the gray. The deep washes are placed over the

light ones, except in cases where the two are in opposition, and would counteract each other, as in a yellow pansy bordered with purple. The yellow wash cannot be put all over the pansy, covering the parts where the purple is to go, because when purple is washed over yellow, it loses its color and looks brown; therefore the parts where the purple belongs, must be left free from yellow. There is no need, however, to omit the yellow from that place in the pansy petals where the blotches — called the eyes and beard — are situated, because the blotches are so dark that the color beneath will not affect them.

The cases where the dark wash does not go on over the light ones, are exceptional, and must be recognized as such. In washing in a light color, it is usually carried all over the petal, no space being left for the deep color.

One wash is, as a rule, allowed to become quite dry before the next is put on. This gives the shading a blocky appearance, because the edges of the washes do not become indistinct. Under unskilled hands this blockiness becomes hardness, but it ought to be so controlled as to afford only an effect of crispness and reality.

These three peculiarities; namely, working from the light tones down to the dark, putting on the dark washes over the light, and permitting one

wash to dry before the next is added, sum up the special characteristics of dry-paper work, which leans to the side of realism rather than impressionism.

As an illustration, it will be assumed that the student has drawn a rose-leaf, and wishes to paint it. He begins by washing the lightest shade of green, that is, the tint of the high light, all over the leaf. After that is dry, he looks for the next darker shade of green in the real leaf, and washes that shade all over the pictured leaf, except where he sees the high lights. After that, again, dries, he looks for the shadows, and paints those successively, in the shape and color in which he sees them on the real leaf. The shape of the leaf shadows is always largely governed by the veins, but these veins are not to be indicated as stringy lines. If the actual shape of the shadows is imitated, that will show sufficiently the character and position of the veins.

The second wash — that is, the wash that is put on immediately after the high-light wash — must never show a very pronounced difference in depth of color from the first wash, as too abrupt a deepening of tone gives great hardness. Also, very dark color must be used sparingly in light flowers. The darker a shadow is, the smaller it is, generally speaking.

In laying in the first tint of a colored flower, or the lightest shadow of a white one, the paint must not be carried from one petal to another in one great wash; each petal must be painted separately, and must be kept apart from the adjacent ones by leaving the tiniest possible thread of white between. This is done chiefly to prevent the anatomy of the flower from being lost. The white line should be so very narrow, and so broken, that it does not impress the observer as being a line at all. As it has the effect of making the petals stand out and seem distinct, it should only be allowed to remain permanently in foreground flowers.

When yellow appears in a flower simply as reflected light, or light shining through the petals, it is one of the last tones to be added; but when it appears as a local color, — as in the middle of a wild rose, a cosmos flower, or a water lily, the spike of a calla lily, or the throat of a Cattleya, — it should be put in first of all. This is because yellow, when it thus occurs, is the most life-giving element in the picture, and its full value must be preserved. Putting it in at the beginning is simply a precaution that insures its correct placing, and defines its full limits at once, so that there is no danger of encroaching upon its proper ground with other color, and so diminishing its importance.

Plenty of color should always be mixed, — enough

so that the brush can be dipped into it. The point of the brush is to be used for shaping the shadows, and putting in details; but all washes must be made with the body of the brush, using a few broad touches, and never going back over partly dry ground. It will not do to stop in the midst of putting on a wash; it must all go on at once, as wet color cannot be joined to dry without the junction remaining permanently visible. The brush should be full enough of color not to drag upon the paper, but not so full that the color runs off and stands in a drop upon the surface, as in that case the paint settles and forms a hard, dark line. If a drop does chance to be left by the lifting of the brush when a wash is finished, it may be removed by touching it very delicately with a damp sponge, or with the edge of a fragment of blotting-paper. Neither sponge, blotting-paper, nor cloth should ever be pressed on the wet surface, as the freshness of the wash and the texture of the paper are thereby injured.

The following hints as to the colors which are suitable for painting different sorts of flowers, may be useful to the amateur, who is not familiar with the peculiarities of the various pigments. These hints are not to be considered as recipes, but simply as suggestions of how a pleasing result may be obtained.

Yellow flowers, and yellow middles and stamens of flowers, may be painted with Aureolin and the two Cadmiums, used alone or in combination, as the subject demands. For the gray shadows of yellow flowers, Orange Cadmium and Hooker's Green No. 2, mixed together, give a good color.

Blue flowers demand the brightest blues in the list, New Blue and French Blue, but these sometimes require to be modified by the addition of a little red or yellow. The deep shadows may be of a duller blue, in which Indigo is mixed. If a gray tone is desired, a little Burnt Sienna may be added to the blue shadow tint.

Purple flowers are painted with Permanent Violet and with mixed purples, the brightest of the latter being composed of French Blue and Carmine. Purple Madder is useful for the very dark touches. A gray purple may be produced by mixing Prussian Blue or Indigo with Carmine.

Red flowers are painted with Carmine, Orange Cadmium being added when a scarlet tone is needed. The shadows may be rendered with washes of Burnt Carmine, and with a mixture of Carmine and Hooker's Green No. 2.

Pink flowers must be painted with Rose Madder, because it is the only bright pink paint; but since it has no great depth of tint, Carmine must be mixed with it for the stronger tones. The gray

shadows may be painted with a mixture of Rose Madder and Emerald Green, a combination that requires to be handled with great care, as it has a strong tendency to decompose and become muddy.

White flowers may be shaded with a gray composed of Indigo and Sepia. Neither element should be allowed to preponderate, because if the shadows are too blue, they will look solid and stony, while if they are too brown, the flower will seem yellowish instead of white.

All the warm shades and the bright colors are usually put in a flower before the gray shadows are added; but in flowers which are practically white, with only a touch of color, the reverse is true. In apple-blossoms, for instance, the flowers are shaded as if they were pure white, and the pink tinges are painted afterward.

Green leaves, which are generally to be kept subdued in tone, are best painted with mixed greens. Indigo and Indian Yellow make a very good combination, which can be varied by using different proportions of the colors; Prussian Blue and Indian Yellow yield greens of the same general character as the foregoing, but brighter; Hooker's Green No. 2 and Burnt Sienna give various olive and brownish greens. The effect of light shining through a green leaf or a white flower may be

obtained by carrying a wash of Aureolin over the leaf or flower after the shading is done.

When it is desired that the edge of a shadow or wash should fade off gradually, instead of stopping suddenly, it should be put on as usual; but before it has time to dry, a clean, moist brush should be passed smoothly along the edge of the wet color. This will soften the edge, and allow it to blend in with the adjacent tint.

The question of background colors is so wide that it is hardly possible to give any definite advice without seeing the particular picture for which the background is required. Indigo, Indian Yellow, and Sepia, mixed together, give a satisfactory range of dull, grayish greens. Hooker's Green No. 2, Indigo, and Sepia afford a series of colder tones. Prussian Blue and Burnt Sienna, combined, make very pleasing atmospheric greenish blues, which are not aggressive. As for foregrounds, if the amateur has no special, actual surface in mind, such as an onyx table or a damask cloth, he may use a wash of Sepia for his foreground, or a mixture of Sepia and Indigo. As has been said, it is always advisable to keep both background and foreground dull and subdued, in order to give the subject of the picture greater value.

Nearly all the instruction given for flowers, will apply equally well to fruit, except that with the

latter it is often desirable to model the color while it is still moist. When such is the case, the second wash of paint is put on before the first is dry, so that they run together more or less; and the third wash before the second is dry, and so on. Colors must be used rather wet for this sort of work, but not so wet that they mingle and are indistinguishable. In round fruits, like oranges and plums, a rotundity of effect is gained by moist modeling.

The most should be made of all color that can be discerned in fruit. Purple plums show great diversity of tone in the same individual, blue, purple, red, and amber tints being often visible; there are bright red lights in blackberries, while green grapes have frequently a pinkish tinge.

When still life is used with flowers, it must be kept subordinate, and therefore all its striking details (such as the brilliant high lights, and the decoration, if it has any) must be severely toned down; but in a picture where still life forms the subject of the composition, the object in the foreground may be brought out and elaborated, as in the case of flowers, and effects of distance in the other objects attained in the same way, also. Bright colors may likewise be used.

Pottery and porcelain often have a high glaze, and sometimes their gloss is so brilliant that the high lights seem white, even on dark ware. The

custom of working around such a high light, in putting on the color-washes, and leaving the white paper to represent it, causes it to seem very brilliant, but has one disadvantage; that is, the color is apt to settle at the edge of the white space, and so outline it with a dark line, spoiling its effect as a spot of light. Some artists, therefore, do not leave these high lights, but carry the color all over the object, obtaining the high lights, when the color is dry, by washing off the color at the required spot with a sponge. If a hole the size and shape of the high light is cut in a bit of water color paper, and the paper is laid on the picture, with the hole over the place where the high light ought to be, the sponging can be done through the hole without danger of injury to the surrounding color. The paper must be held down firmly, and the sponge must be wet in clean water, and then squeezed as dry as possible; for if a drop of water is pressed out during the sponging process, the water will run under the paper and cause trouble. Small errors in a picture may be removed in this way, the paper being allowed to dry before the corrections are painted in.

Sponging out large mistakes is rather dangerous, because, unless it is done very skilfully, the color is apt to be smeared all over the paper, and the picture ruined. If such sponging is undertaken, the

sponge must be constantly cleaned in fresh water and squeezed dry, and the paper must not be rubbed too hard. In sponging out a background, the motion should be from the subject of the picture outward, to avoid injury to the flowers, or whatever the subject may be.

If pottery is figured, what has been said about simply suggesting detail must be remembered, and only the effective and noticeable parts of the decoration must be put in. A hint to the eye, cleverly given, will be far better than an elaborately worked-out plan of the ornamentation.

When clear, untinted glass is to be represented, the student must place the real glass, from which he is working, on just such an actual foreground, and against just such an actual background, as he means to have in his picture; for being transparent, the glass takes the color of what is behind and under it. If the glass he uses as a model stands on a red tablecloth and has a white wall behind it, and he paints it as he sees it, and then, in his picture, washes in a green background and a brown foreground, the glass in the picture will not look like glass at all, and its appearance will be quite unaccountable to the casual eye. Colored glass is also influenced in the same way, but not to the same degree. Water in glass of any kind entirely changes the lights and shadows, so that

they are not at all the same as when the glass is empty. Stems and twigs showing through a glass vase should never be represented with as much brilliancy and distinctness as those outside, otherwise they will not seem to be inside the glass. The refraction of light causes them to appear to be broken where they enter the water, a fact that must not be ignored in the picture.

Metallic paints are absolutely inadmissible for use in pictures. In representations of china or glass having a gold decoration, the gold must be rendered by yellow, brown, reddish, or greenish tones, as the light and the situation happen to demand. The proper colors, rightly employed, will give the desired effect of metal. Objects of copper, brass, bronze, silver, or pewter should be painted on the same principle.

Distinct reflections of adjacent objects are often seen in highly glazed pottery, bright metal articles, and glass. These are frequently effective, introduced in a picture, but should not be made as definite as they really are. The same may be said of the reflections cast by still life and flowers when they are placed on a polished table of wood or stone. The representations of such reflections must be kept so low in tone that they do not rival in importance the object that casts them. A light additional wash of the foreground color, carried all

over the foreground after the reflections have been painted, is useful in subduing them and rendering them harmonious.

It is often desirable with still life, as with fruit, to model the color while it is moist, in order to secure very gradual effects, and to avoid abrupt transitions of tint. The washes must be made rather wet, but not so much so that they run together in confusion, or settle upon the paper in streaks. The color must always be kept under control.

Books, music, and all printed matter must be painted with extreme care, and require great accuracy and delicacy of touch. They are not generally popular subjects, and are too difficult for beginners to attempt.

Drapery also must be carefully handled. The high lights on the folds, especially in velvet and satin, must be given their full value, and the shape of the shadows must be kept, else the effect of draped fabric will not be produced, but rather an appearance of something solid and stiff. It is sometimes advisable to blend drapery shadows a great deal. If the fabric is figured, the figures must be merely suggested, not elaborated. Drapery employed as a background must be kept subordinate in value, and the fact of its presence conveyed by hints rather than by definite delinea-

tion. Carefully painted plush or velvet, although very beautiful in itself, is too rich a background for flowers, and if a drapery background is wanted for them, something having a dim, shadowy effect should be selected.

While the student is working at a picture, he ought now and then to set it away from him and look at its general aspect, for by so doing he will be able to see and correct many faults which are not evident to him while it is kept constantly close under his eye. After he thinks the picture is finished, he should look at it from a distance and take in its effect as a whole ; for he will invariably find, by thus studying it, that there is still a great deal to be done in the way of touching up here and toning down there. It will often be found requisite to throw back a part of the group into greater shadow, and this may be done by washing a tone of gray over that part, as a whole. The shadow washes added in this wholesale way must be put on with few touches, and very lightly, and the surface on which they are placed must be quite dry, otherwise the brush will wash up the color beneath and spoil it, especially if it be dark.

In conclusion, the student is warned against leaving tiny patches of white paper visible in any part of his picture that he wishes to keep shadowy, distant, or obscure. Such little patches always

have the effect of bringing forward the part in which they occur.

Much has been included in this chapter which is applicable to all painting. It will not be repeated in the chapters devoted to Landscape and Figure painting, because the limits of the volume forbid needless amplification, and repetition of a printed explanation is obviously unnecessary.

LANDSCAPES AND MARINES

LANDSCAPE and Marine painting are, in some respects, the pleasantest branches of art to pursue, for they are open-air occupations, and take their votaries into all sorts of charming and picturesque places. Moreover, they give a broader view of nature, and an increased appreciation of those beauties of sky and sea and land, which are so familiar that many persons do not recognize them as beauties at all.

The landscape artist can never hope to rival nature; for nature has real light, real distance, and real atmosphere with which to give effects, while he has nothing more luminous than white paper, and only a flat, vertical surface for the representation of miles of distant country, and the immeas-

urable depths of the heavens. When the limitations are seriously considered, it seems a miracle that a painter is able to reproduce the aspect of scenery with any semblance of truth.

Before the student makes a practical attempt in this line of work, he should learn to look at a landscape as a whole, and take in the general, reciprocal effect of earth, water, and sky; for the untrained eye is very apt to fix itself upon detail, and ignore things of greater importance. Thus a beginner's attention will be absorbed by a stump, or a clump of grasses in the immediate foreground, when the actual value of such a detail, in a picture, would perhaps lie in its ability to lend value to the distance by force of contrast. The front foreground of a picture is by no means always the most important part of it. Sometimes the sky is the chief feature, sometimes far-away aspects of mountains or cliffs; and in such cases, foreground items are introduced simply to establish a proper perspective, and to give reality to the picture. Even in pictures where the sky and horizon are not visible, as in bits of deep woodland, the principal object is seldom or never closest to the eye, being, on the contrary, somewhat removed from it. This is one of the differences between Landscape and Flower painting; for in the latter, the main feature of the picture is usually nearest. A flower study, however, includes only

an extremely limited area, and the subject is therefore necessarily regarded at short range; while a landscape, however small, is so comparatively extensive in compass, that the observer has to be given a sense of removal before he can grasp the meaning. As a general rule, the wider the proportionate expanse of the scene included in the picture, the farther away the main object is placed. For example, if an artist paints an ocean picture with a wide horizon, it is usually for the sake of introducing an enormous billow as the chief feature, or else the setting sun or rising moon. In the first case, the billow, which is the principal object, is in the foreground, it is true, but it is also true that the horizon is not extensive in comparison with the space occupied by the billow, but is extended only far enough to accommodate the billow's length within the limits of the picture. In the second case, where the sun or moon is the principal object, and is in the extreme distance, the horizon line will generally be found to continue for a comparatively long distance at each side, and the picture will include an expanse of sea and sky of which only a small proportion is occupied by the orb.

In water color landscape work, it is very much better to aim at securing a simple, pleasing suggestion of effect, than to try to represent scenery with photographic accuracy. There is a great deal of

sentiment in nature, but it is an ideal quality that the photographic camera is no more capable of reproducing than it is of reproducing true perspective. "Photographic accuracy" is, by the way, an expression which contradicts itself; for photographs, however definite and seemingly exact they may be, are by no means accurate — a fact that is specially emphasized by this very matter of perspective, a perspective photograph of rectangular buildings always making the right angles nearest the eye appear to be sharply acute.

Sentiment in a picture is something indefinable, — an effect produced upon the emotions through the eyes. It is a word which, with the word *feeling*, is much abused in this connection. These terms are so vague that they defy analysis, and are often employed to turn the edge of deserved criticism, directed toward faults of incompetence and carelessness. Nevertheless, they have a real meaning, just as the emotions have a real existence, although an intangible one. "The poetry of earth is never dead," and the true landscape artist feels this, finding in the scene before him something beyond the actual, material forms which are visible to his physical eye. What he sees produces in him a mental impression of melancholy, cheerfulness, repose, desolation, or disturbance, and his skill lies in making his picture convey to the observer the same im-

pression that he himself received from the real scene. It is impossible to give directions for putting sentiment into a picture, because sentiment depends entirely upon the appeal the landscape makes to the emotions of the painter, and if it does not make an appeal, he cannot paint it as if it did. His work may be correct technically, and he may have his color under entire control, but his picture will lack feeling.

The student cannot, of course, expect to introduce into his sketches an abstract ideal element, which is so intangible that experienced artists cannot always catch it and fix it upon the paper satisfactorily. He must first acquire an understanding of color and a deftness in using it, as well as a knowledge of the mechanical resources at his disposal. Nevertheless, he can, from the beginning, try to see nature in the right way, and to bring himself into sympathy with nature's moods. As there can be no sentiment in a picture without a corresponding sentiment in the person who makes the picture, the student should encourage himself in the habit of contemplating natural scenes (quite apart from an immediate intention to paint them) with the intellectual as well as the bodily eye. Habits of receptiveness and appreciation will be of the utmost benefit to him in his future work.

There is another reason, besides that of imbuing himself with sympathy, for the student to give attention to the face of nature whenever he has an opportunity. The landscape artist has to rely largely on memory in making his pictures, because the light is always changing, and some of the phases he depicts — as dawn, sunset, and twilight — are extremely transitory. A mind trained to take in and retain facts of form, color, and general proportion, and well stored with such recollections, is of the greatest value to him.

The student of Landscape and Marine painting, as of Flower painting, should begin by copying water color facsimiles; and he must be positively sure that they are facsimiles of water colors, because facsimiles of oil studies are much more difficult to copy in water colors, and are not of so much benefit to the copyist. Something small in size and simple in treatment should be chosen, and the student should examine it carefully, and try to analyze its coloring before beginning to paint, because he cannot pause indefinitely to consider matters when he has begun to put color on the paper.

The instruction here given for color-handling in landscape work is quite different from that given for flowers, and is based on other principles. Broad, general effects are aimed at, with very

little definite detail. The aspects of nature are to be suggested, rather than accurately defined, but in the effort to avoid hardness, there must be no degeneration into woolly softness.

The preliminary pencil sketch for a landscape or marine view is therefore very slight. The horizon line is indicated, and the conspicuous trees, buildings, or boats, drawn in. If the landscape has water in the foreground, that also is outlined. If the foliage of the trees is very thin and light, it need not be sketched at all, the trunk and branches only being shown; if it is heavy, an indication of the large masses will suffice. Dim, distant trees are not given, and no detail whatever is put in with the pencil. When the moon or the sun appears, however, it must be drawn with perfect accuracy, and its shape must not be marred in the subsequent painting, for any defect in the curve will be painfully obvious.

In either copying or working from nature, the sky is first put in. The paper may be previously moistened with clean water, or not, as the student prefers. If there are light-colored sails, buildings, or foreground trees against the sky, or brilliant, definite cloud edges, for which the paper must be left white, it is better not to dampen the surface, as, if it is wet, the color will creep into the spaces which ought to be kept free from it.

Beginning at the top, the upper tint of the sky is applied, not in one great, sloppy wash, but by a series of touches with the point of the brush, working horizontally across the paper, and always in the same direction. The color is used quite wet, and is not allowed to dry at all, along the edge. If it shows any tendency to dry at one end, while the paint is being carried on toward the other, it must be softened off with a clean, wet brush, and thus kept moist until work is resumed at that point. If the sky is a cloudless one, as is often seen, it will be darker toward the zenith; therefore, at the top, the color mixed for it is carried across the paper in full strength, but as the sky is brought lower, the color is weakened by dipping the brush in water, diluting the tint gradually more and more, until it is of the required pallor at the horizon. In the case of a cloudless sky which changes color as it goes downward, — if it is blue toward the zenith, for example, melting into pink at the horizon, — after the color of the upper part has been put in, to the proper extent, the brush is rinsed in clean water, and dipped into the color for the lower part, which is then worked in in the same way, the edges of the upper color being kept so moist that the lower color blends with it. An ample quantity of color must be mixed beforehand, so that

there will be no danger of the tint giving out before the sky is completed.

Care must be taken not to have the color too wet, and not to put on too much at a time; for it must be kept under perfect control, so that it may be guided as the painter wishes. Also, the student must never go back and try to touch up partly dry color, for that will spoil it. The practice of making graduated washes, which was recommended in the Introduction, is of great help to the landscape painter, as it teaches him to govern the depth of his color and its direction. Similar washes, changing from one color to another, are of equal assistance for the same purpose.

When tree trunks, sails, buildings, or other objects coming against the sky, are lighter than the sky, the sky wash must be worked around them, and it must also be worked around white clouds and the sun and moon; but when objects coming against the sky are darker than the sky, the sky wash may be carried down to the beginning of the horizontal plane, and softened off there with clean water. In such cases as where a yellow mass of foliage comes against a blue sky, the sky wash must be softened off with clean water within the limits of the mass of foliage, so that when the yellow foliage color is painted in, there will be no previous tint of blue to counteract it; but the sky

wash must not be softened off too soon, or it will appear paler immediately around the foliage, which will give a bad effect.

When the sky is of delicately varied tints, but the clouds have no distinct and definite borders, either bright or dark, the brush is dipped first in one color, a little of which is carried along the paper, then in another color, which is allowed to run in with the first, where they adjoin. For lighter places in the sky, the brush is dipped in clean water. The student must bear in mind that the edges along which he is working, are to be kept constantly moist, for any hard lines in a sky spoil it. The washes for these beautifully tinted, indistinctly cloudy skies are sometimes more effective if the slope of the working surface — which is usually downward, toward the worker — is reversed from time to time, so that the color settles a little, thereby giving a look of rotundity here and there, as if the clouds were somewhat heavier in places. The color must not be wet enough to run back over that part of the sky which is already finished and dry, for it will then form hard lines.

It is important that the student should remember to begin at the top of the paper and work across it laterally, going downward gradually by horizontal stages. He is to use a large brush full of color, but is to put on only a little color at a

time, and to guide it carefully with the point of the brush. He is never to stop his sky wash in a sharp line at the horizon, allowing it to settle, but is to keep the edge soft.

When there are clouds lighter or more brilliant than the sky itself, — white clouds in a blue sky, for example, or golden sunset clouds in a pink sky, — the sky wash must be worked around them; but whether the clouds shall be softened at the edges or not, depends upon their character. Some white clouds are very hazy about the borders, while some sunset clouds are very distinct. It is better never to sketch in a cloud with the pencil, unless such an indication is absolutely necessary. The preferable way is to learn to have sufficient accuracy of eye and touch so that clouds may be put in without any preliminary drawing. Golden or other luminous, colored clouds, which are left white when the sky tone is washed around them, may be given their proper tint after the sky is dry; not before, else the sky and cloud color will be apt to run together.

When the sky is heavily clouded toward the zenith, but the clouds stop abruptly toward the horizon, showing a clear band of sky, the cloudy part of the sky is modeled in its various tints, as has been described, but is not softened off where it ends, the shape of the uneven clouds at the edge

being distinctly shown. The tint of the clear band of sky is washed in after the clouds are dry, otherwise the cloud tint will run down and spoil it.

In the case of dark, windy skies, with spaces of clear blue or yellow showing between the clouds, the clouds are worked around these spaces, which are left white and afterward tinted. The color for such spaces, and for tingeing the sun and moon, must never be used very wet, as it requires to be perfectly flat, and if it runs, it will be liable to settle.

When clouds have narrow, fiery edges, as is sometimes the case in stormy sunsets, these edges are left pure white. If the general tone of the sky is pale, and there are definite darker clouds, the sky wash is carried on without regard to the clouds, which are painted over it after it is dry.

Color must never be permitted to settle in a hard, dark outline around the sun or moon or clouds, no matter how clear and distinct these objects may be, for sharp lines destroy the effect of atmosphere.

Lightning is not a desirable thing to paint, because its instantaneous character is one of its chief peculiarities, and when it is depicted, it becomes a steady effect of light, like sunshine or moonlight, and so loses something of its real nature. If it is to enter into the picture, however, the sky must

be worked around it, and the white paper left to represent it.

When a sky has been worked up in too high a key of color, it may sometimes be improved by sponging it in a crosswise direction with clean water. The sky must be thoroughly dry before the sponging is begun, and the sponge must be constantly squeezed in fresh water, to free it from the color it collects, otherwise the color will be re-distributed in streaks.

The horizontal plane is the next thing to be considered. It begins where the sky touches the earth. Sometimes the far-away horizon line is visible, sometimes it is concealed by distant trees — which are not yet to receive attention; but in either case, it is best to start it before the sky is quite dry, in order that there may be no hard line of division between the two, but that their junction may be softened a little. Sharp definiteness hopelessly destroys distance, and is therefore to be sedulously avoided, except for the extreme foreground. When the sky is cut by hills, rocks, or buildings near at hand, their outlines are, of course, more distinct.

The horizontal plane is begun at the top and worked across the surface, like the sky, but the coloring is heavier and less diffused, the general tone being given rather by minute touches of pure

color, allowed to run together and mingle on the paper, than by large, even washes of subdued mixed color. The tints in the middle distance are deeper than those in the foreground, and all lines occurring there are kept as level as possible, to aid the receding effect. Toward the front of the picture, the touches become somewhat larger, and the coloring lighter and more brilliant. If there is water in the foreground, it must be left white, its own tone being added afterward.

After the sky and foreground are in, the other features of the picture may receive attention. Buildings should not be worked up with a great deal of architectural detail. Such detail should be correct as far as it goes, but it should be simply suggested. All color in buildings and rocks should be given its full value.

It is not necessary to sketch in masses of distant foliage against the sky, for any hint of an outline injures the far-away aspect. Growth of this sort should be worked upward from the ground, becoming lighter as it ascends, to give the effect of gradual thinning near the top. The same principle of broken color should prevail here as in the foreground ; that is, if the general tone be grayish purple, instead of one flat tint of that color being washed in, small touches of red and blue should be employed, the paint being kept wet enough

to mingle on the paper. At the top, the hazy effect of thin twigs or leafage may be obtained by scratching the wet color upward with an ordinary bristle brush, or it may be lightly rubbed with the clean finger. If darker tree trunks show, they may be delicately indicated afterward. There should be no hard line where the trees join the ground.

The student must never forget that color, which seems strong when it is put on decidedly wet, will dry out very much lighter, and he must guide himself accordingly, otherwise his picture will look flat and weak when it is finished.

Near-by tree trunks are also to be worked upward, the general tone being obtained by intermingled tints. If the trees are bare, the boughs and branches must, of course, be shown, and may be painted in the same way; but if they are in leaf, the anatomy is simply hinted at between masses of foliage, the latter being put in with small touches, more distinct in the trees nearest the eye. The leafage toward the extremities should be very lightly indicated, and spaces should be left where the sky shows through it. The anatomy of terminal twigs is not to be painted in at all, a few small, detached touches rendering the final scattered leaves.

Water in the foreground reflects the color of

the sky, or of its immediate environment, but when reflections of objects occur, this general tint need not be washed in until after the reflections are painted. These reflections are worked downward vertically, and sometimes have a faint suggestion of lines; they do not end sharply, but fray off into nothing. Ripples are often rendered by leaving horizontal, broken lines of white paper, and these lines must be respected when the main tone of the water is washed in.

Immediate foreground details, such as bushes, stones, and grasses, may be painted with a small brush, if the student prefers. They are the most definite things in the picture, and the paper should be dry when they are put in, so that they will remain distinct.

In marine pictures, if the horizon line is visible, it should be made evident by a slight difference in tone between the sky and sea, but should never be hard; and above all things, it should be absolutely level. The coloring of water must be made much more even, delicate, and gradual than that of land, more like sky coloring in fact, and all distant effects be kept horizontal. As the waves approach the front of the picture, their curved or pointed shape may be more clearly shown. If there are no high lights nor white foam, a light wash of the general color may be carried down to the edge of

the picture, and the shape of the waves indicated by painting the shadows in their hollows; but for all whites, the white paper must be left.

When the horizon line does not appear, as in misty views, the sea wash may be carried on as a continuation of the sky wash, the two melting together imperceptibly; and if any boats are introduced, they should be painted in a much flatter way than if the air were clear, no sharp edges being shown.

When there are light sails on the horizon or elsewhere, the sky or sea wash must be carried around them, but where the sails are darker, they may be painted in afterward, when the paper is dry. The nearer a boat is to the foreground, with the more detail may it be painted, but the cordage should never be worked up with too great minuteness.

The student should make a number of copies from good water color facsimiles, keeping in line with these general directions, before he attempts to work from nature; for he needs to possess control over his color and some knowledge of how various effects are gained, when he begins to do out-of-door work. One of the most difficult things he has to learn, is this mechanical mastery of paint. The wetter it is, the more apt it is to escape him and to run here, or form a hard line there, before

he knows it. The small touches of pure color which he employs, must mingle on the paper, and yet keep their clearness, for if they run together in such a way as to become muddy, the charm of the picture is gone.

When the student is going to paint from a real landscape, he must first decide how much of it he intends to include in his picture. He may make up his mind more easily on this point, if he looks at the landscape between his hands. The horizon line is first to be indicated, and it is best never to allow it to divide the picture exactly in the middle. The limits of the foreground are then to be defined by sketching in the rocks, water, trees, or buildings in the front of the picture. Distant foliage against the sky, need not be shown at all by the pencil, unless it is lighter than the sky, and therefore to be left white. The same may be said of distant mountains; if they are darker than the sky, they need not be drawn, but may be painted in afterward, over the sky wash; if they are paler, the outline must be indicated, and the sky wash must not be carried over it.

The student must try to see the landscape as broadly and simply as possible, taking in general effects of form and color, rather than details. He must avoid the employment of hard, cutting lines, and must restrict all definite minutiæ to the fore-

ground. He should put in his picture only so much of what he sees as will give the impression he desires to convey, and when he has attained his object, he should stop. There is a great deal in knowing when one has done enough. A lack of this knowledge sometimes causes even an experienced person to work up a really creditable and pleasing sketch into an unsatisfactory picture. The spirit of water color landscapes lies in effect, not in high finish, and when the effect has been gained, the work is virtually completed.

The less the surface is worked over, the fresher and clearer the color will be. It is always desirable to strike the right depth of tone for the sky wash at once, and so avoid the necessity of going over it again, for a second wash will detract from the atmospheric transparency; but if the sky is found to be too weak, a second wash will be necessary, which must not be put on until the first is dry.

Rough paper is better than smooth, for landscapes and marines, as the inequalities assist in softening the distance, and give texture to the foreground. Moreover, it is often desirable to allow infinitesimal flecks of white paper to remain visible, here and there, in the horizontal plane, to give it vitality, and these are more easily and naturally left when color is washed on a rough surface.

The anatomy of trees is very important in land-

scape work. Every sort of tree has its own peculiarity of shape and growth, and the artist must appreciate these peculiarities in order to paint trees so that they are recognizable. An apple tree is different from a meadow elm, and that again from an oak, and each kind should be as plainly characteristic in a picture as it is in nature, even though its character be expressed very simply. The form of the trunk, the way the boughs diverge from it, the ramifications of the branches, are all individual and significant, and should never be indicated ignorantly and carelessly. The student will gain much valuable knowledge and practice by making separate water color studies of detached trees, not necessarily elaborating them, but representing as truly as possible their general appearance and habit. It is well to have an ordinary sketch-book, in which pencil memoranda may be jotted down, — sketches of branches and leafage, suggestions of boats, birds, or buoys, peculiarities of rock formation, picturesque outlines of buildings, or pleasing cloud shapes, — for these are frequently useful as a reference. Colored studies of skies are also valuable, especially of the fleeting, changeable tints of dawn and sunset. They must nearly always be made more or less from memory, as the light is often too dim for painting to be done at the actual moment.

If any serious mistake occurs in putting in a sky or foreground, it is best to immediately sponge out the whole thing, and begin over again as soon as the paper is in proper condition; for patched-up, mended work is usually muddy and unsatisfactory. If the color has not had time to dry into the surface, it may be almost entirely removed by careful sponging with clean water. In case a defect occurs in the sky near the location of a tree, the foliage can sometimes be made to conceal it, and in that case it may be allowed to remain.

As the light is continually changing, and varies greatly at different times of day, out-of-door work cannot be carried on continuously on the same picture. If a study from nature is begun in the morning, it must be laid aside as soon as the actual view has lost its early light and coloring, else the character of the picture will not be maintained. Landscapes painted in the studio are either sketches done from memory, or pictures worked up from careful memoranda made from the real scene at the real time.

The tone of a landscape is different at different hours of the day, and on different days. At dawn and after sunset it is of a subdued pitch, while during the forenoon and afternoon, in clear weather, the key is high. On hazy days the coloring is soft and subtle; and rain and heavy clouds take

it nearly all away, and give a general aspect of grayness.

If the student finds that his foreground is too patchy or too cold, he can sometimes "pull it together," as it is called, by carrying a general wash of yellow all over it, which will blend the colors to a certain extent, and give them warmth. If the tone is already warm enough, a wash of pure water may be used instead, which will soften the patchiness a little.

The beginner should learn discretion in selecting his subjects. There are many objects in nature which are pleasing in themselves, but do not make a pleasing picture. For example, a tree full of red apples is a beautiful sight, but in a picture it does not show to advantage. At the distance from the spectator at which it must be placed, in order to give a view of it as a whole, the fruit appears simply like red specks; for apples grow in so scattered a way that they do not form a mass of color, but are simply individual details. When growing apples are to be painted, it is better to choose a single, small, well-loaded branch, instead of a whole tree, for the branch may be represented as close to the eye, and the fruit shown of life size, and properly modeled.

With regard to general coloring, it may be said that blue and purple give distance; reds, browns,

and moderate greens are useful in the middle plane ; while vivid yellows and greens, with all sharp contrasts, should be reserved for the foreground, as they have a natural tendency to come forward toward the eye. Bright pigments may be employed for sunny scenes of the middle day, but more subdued colors for morning and evening views.

Aureolin is of too lively a character for extensive use in landscape work. Its luminous quality makes it valuable for effects of brilliant sunshine, and for particularly gorgeous sunset and sunrise skies. It is also a desirable color to wash over the sun itself, when that orb is visible, and may be employed alone, or with the Cadmiums.

The Cadmiums, because of their aggressive tendency, should generally be confined to foreground use, and should not appear in large quantities. As a rule, it is better not to mix them with other colors, with the exception of Aureolin and Carmine.

Indian Yellow is a paint of universal utility. It gives soft, clear sunset and sunrise yellows, and enters largely into the coloring of green and autumnal grasses and foliage. It is also used in water greens.

Yellow Ochre is a fine landscape color. It gives good effects of distant sunlight on sails or rocks,

and is serviceable in buildings, stretches of sand, and throughout the horizontal plane generally, but is rather earthy for employment in skies. In combination with New Blue, it yields soft, quiet greens for moderately distant or shadowed foliage, and it is also valuable in autumnal scenes.

Emerald Green is used entirely pure. In pale washes it is exceedingly effective introduced into certain sorts of skies, and is also a desirable element in foregrounds of pictures painted in a high key of color, but it must be employed in small masses only.

Hooker's Green No. 2 may be combined with Aureolin, and used in a light tone, for the transparent green sometimes seen in sunset skies. Alone or in combination, it enters into foliage and foregrounds, and gives a good effect in marine work.

Prussian Blue may be employed in greenish skies, and for water and distance, and is an element in bright foliage and grass greens. Like all the blues and greens, it may appear in a pure state among the minute touches which are employed to give the general effect of broken color in the horizontal plane.

Indigo is too flat for atmospheric tones, but is otherwise used like Prussian Blue.

French Blue is employed for skies and distance,

alone or as an element of purple. It is of value in some water effects.

New Blue is highly desirable for skies, alone or mixed with Light Red. With the latter, it makes fine grays and purplish tones for clouds and distance; for far-away, indistinct foliage and tree trunks, the two are used in small touches, and allowed to mingle on the paper. New Blue combined with Carmine gives good aërial purples for clear skies and delicate distance.

Permanent Violet is used in tiny touches of broken color.

Rose Madder is employed for pink skies, but would better be avoided for other purposes.

Carmine, like Permanent Violet, is used sparingly in tiny touches of pure color, and also as an element of purple. Pale washes may be introduced into quiet sunsets, but scarlet lights are obtained by using a strong mixture of Carmine and Orange Cadmium.

Light Red is a serviceable color for sky, earth, and sea. It makes good grays in combination with other colors, and is used alone in light washes for evening skies. For buildings, autumn foliage, and foreground touches it is likewise of value, and for ruddy sails.

Indian Red is too dull for skies, but is a good red for general middle and foreground purposes.

Burnt Sienna is a valuable color for foregrounds and middle distance. It is useful in buildings and autumn effects, and also makes good greens with Hooker's Green No. 2.

The uses of Brown Ochre are similar to those of Yellow Ochre, but it gives deeper tones.

The two Umbers, with Vandyke Brown and Sepia, are used for various purposes where very dark tones are required, and for brown effects of tree trunks, shadows, buildings, rocks, and sharp foreground items.

As no petty details are introduced in ordinary landscape work, it is better to avoid the employment of Chinese White altogether, as it gives an extremely solid and definite effect.

The student will readily understand that a mere hint of the use of particular colors has been given. Their general qualities only have been touched upon, and their most obvious purposes alone mentioned. Many landscape artists work, in water color, with an exceedingly small palette, — perhaps a dozen pigments, — and every painter has his own pet list. All the colors named are not requisite for landscapes and marines, but only experience can teach the student what special selection will suit his individual style of work.

The introduction of figures and animals into the landscape has not received particular notice, be-

cause such items are simple details, and require no different treatment from other details. They are suggestions of life, — touches of color, — and are not to be regarded as of any importance in themselves.

Finally, to summarize the whole matter in a few words, the student must copy until he understands how to control his color, and how to set to work to reproduce a scene; he must see nature as simply and broadly as possible, and render it by small touches of pure color, permitted to mingle on the paper; he must avoid muddiness; he must render tree forms truly; and he must stop when he has gone far enough.

FIGURES AND ANIMALS

FIGURE and Animal painting are very much more difficult branches of art than Flower, Fruit, Still Life, Landscape, or Marine painting; that is, it is less easy for an inexperienced person to produce a pleasing effect in the first-named branches than in the others, and to escape meriting severe criticism. Long and patient study of form, and light and shade as expressed in black-and-white, is necessary before the pupil is justified in touching color; for the problems of proportion and foreshortening are more readily overcome if they are

separated from the problems presented by polychromatic work. The management of water color, as a medium, although it is sufficiently troublesome, is the least of the obstacles which must be overcome by the student ambitious to paint figures and animals.

A preliminary course of drawing from the cast and from life, is indispensable to a proper understanding and rendering of either figures or animals. For the figure, casts of the best antique statues are chosen as models, because they elevate the taste as well as educate the eye; and by studying them, the pupil not only attains a knowledge of form and proportion, but learns to appreciate abstract beauty. For animals, casts from modern sculpture are chiefly selected, the antique offering comparatively few examples of animal representation. Barye, the French sculptor, is an authority in this department of art, and plaster casts of many of his works, reduced in size, are to be obtained everywhere.

Charcoal or crayon is used in this preliminary course of drawing. The shadows are put on in either lines or blocked masses, the latter being the broader, simpler way, and giving a better understanding of the subject, as a whole. With many artists, there is a prejudice against stump work, — that is, crayon or charcoal rubbed on in bulk with

a stump, or with the finger enveloped in a bit of wash leather, as distinguished from line work done with a point, — but this prejudice is probably due to the fact that, by employing the stump, the inexperienced pupil is often betrayed into errors of woolliness and weakness, and in his admiration for smooth tints and even gradations of shadow, sacrifices force and character. It is possible, however, to maintain both these desirable qualities when working with the stump, and the method of procedure is much more like painting than is working with the point.

If the student of figures or animals, who is at the very beginning of his career, has already definitely decided to be a water colorist, his best course will be to adopt water color as his medium at once, and to make wash drawings in black-and-white, both from the cast and from life, in preference to using either charcoal or crayon. He will thus learn the mechanical handling of the medium at the same time that he learns to draw.

A knowledge of external anatomy is absolutely necessary to success in figure and animal representation. The artist may not be able to call the different bony protuberances, muscles and tendons which are visible, by their names, but he must know that they are there, and must be aware what purpose they subserve, and how they appear under

different conditions of action and repose. Incessant observation is the one true method by which this knowledge may be obtained, and it is worth a score of scientific text-books for giving the student a true appreciation of form, attitude, and motion.

One of the most striking characteristics of human beings and animals is action. The word *action* does not always imply positive movement — it also means the poise of the body. According to Webster, action is "the attitude or position of the several parts of the body, as expressive of the sentiment or passion depicted," or of the physical state of being, might be added. Thus the picture of a sleeping dog may be said to have action, inasmuch as the pose in which he is represented expresses, or makes evident, the fact that he is sleeping. Upon the ability of the artist's eye to appreciate, and of his hand to reproduce, those subtleties of outline and modeling which serve to express action, depends his success as a delineator of living creatures.

The advisability of carrying an ordinary sketch-book, and jotting down in it pencil memoranda of such effects as strike the observation, has already been mentioned; but if this practice is helpful to workers in other branches of art, it is doubly so to the figure and animal painter, for he cannot look about him without seeing innumerable useful mod-

els. In his own household, in the street, wherever he goes, men, women, children, horses, dogs, cats, or cows, present themselves to his eye in all sorts of circumstances and attitudes. The habit of observing striking or characteristic positions, and sketching them as quickly and accurately as possible, even if only in outline, is of inestimable value in training the hand, as well as in accustoming the eye to at once seize the salient points of an object or scene, in preference to unimportant details. Moreover, it cultivates the memory; and as all movement is transitory, a faithful memory is of great worth when an attempt is made to represent motion. A hand-organ man grinding his instrument, a newsboy shouting extras, a bootblack polishing shoes, a cat washing her face, a dray-horse biting at his mate — a thousand such dissolving views are presented to the student's eye every day, and each one offers him an opportunity of educating himself in the artistic expression of form and action. In the beginning, his efforts to reproduce the spirit of what he sees, will undoubtedly be futile, and the result perhaps incomprehensible; but with practice he will learn to discern at a glance the essential features of what he observes, and to transfer them quickly and truly to paper, disregarding all that is not requisite to properly convey the idea.

Any error in drawing or foreshortening is much more obvious and annoying in figure and animal work than it is in other departments of art, and for this reason, the amateur who is only working for amusement would better confine himself to subjects requiring less precise knowledge. Nothing is more irritating to an educated eye than ignorant, misshapen representations of men and beasts — and such representations are but too often seen. An amount of skill which will enable a person to make a picture of flowers or of a landscape that will be at least inoffensive, will not be sufficient to warrant him in undertaking work of the higher and more exacting class. Perhaps the commonest examples of the caricatures of the human form divine which are perpetrated by incompetence, are those presented by painted tapestry. This tapestry is to be met with everywhere, — in shops, hotels, and private houses, — and in nineteen cases out of twenty, it is execrable, in spite of the time and pains which have obviously been devoted to laying on the color.

The necessity for a thorough practical knowledge of figure and animal drawing being thus demonstrated and insisted upon, the possession of such knowledge on the part of the pupil will hereafter be assumed. It will be taken for granted that he knows how to give his subjects a firm foothold

so that they do not present an uncertain, toppling appearance, and that he understands the general principles of foreshortening. This ability will have been acquired during his course of black-and-white work from the cast and the living model, and need not be again mentioned.

All professional artists agree that much more is to be learned by painting from the undraped figure than from the figure veiled and disguised by clothing; but the average amateur has no opportunity for life study from the nude, and the next best thing for him to do, is to work from such costume models as are not so over-burdened and muffled by clothing that the contours of the body are concealed. Clinging draperies, which follow the lines of the figure, are to be preferred to those which are full and ample, and the neck, arms, and feet should be left uncovered. The bare feet, in particular, are difficult to paint correctly, and require special study. The clothing, whatever its style, should never be represented as a mere mass of drapery from which the extremities of the figure project, but should conform itself to the shape of the body it covers, in such a way that the presence of the body, and its general form and proportions, are felt underneath the fabric.

In the same way, the shape of the head should not be entirely lost in masses of floating hair, but

should always be indicated, no matter how slightly, as should the shape of the chin, jaw, and mouth under an ample beard. In long-haired animals, like the Skye terrier, the form of the body beneath the shaggy coat should likewise be regarded. All such contours are to be observed in nature, and must not be ignored in representations of nature.

Animals and little children cannot, of course, be compelled to take, or to maintain, whatever attitude the artist fancies. He must make the most of those moments when such an attitude is accidentally assumed, and should spend them in looking at his model rather than in painting, because he must work largely from recollection. With men and women, however, it is a much simpler matter, as they may be placed in any reasonable pose, and relied upon to keep it indefinitely, and to return to it again after resting. For figures in violent action, such as running, jumping, and dancing, the artist must, of necessity, fall back upon a carefully educated memory, as attitudes of motion are, naturally, of but momentary duration.

For youthful figures, standing poses, or poses indicating movement of some sort, are most appropriate and suggestive, while the attitude of old persons should generally be expressive of repose. In planning an animal picture, some position characteristic of the subject should be chosen. For

example, both a cow and a dog can run; but a cow runs very infrequently, compared with a dog, and therefore, while the attitude of running would be an entirely suitable one in which to represent a dog, it would not be particularly suitable for a cow. The pictured position should be such as suggests some conspicuous natural trait of the animal. Running implies speed. Although a cow moves rapidly upon occasion, she does not do it gracefully, and speed is not her special attribute, calm and repose being more characteristic of her nature. Kittens, on the contrary, are seldom depicted as sleeping, or even lying down quietly, not because they do not do those things, but because extreme activity is one of their most noticeable peculiarities.

For figure work in the house, the light should fall from a sufficient height to throw the shadows downward; and the model should not be placed too close to the source of light, otherwise the shadows will be sharp and hard. The model is usually posed on a higher level than that occupied by the artist, who sits or stands at a distance sufficiently great to prevent abrupt foreshortening, and to enable him to take in the whole figure at one glance. In general figure painting, more striking effects of light and shade are permissible than in portraiture, where a good likeness and the preservation

of the personality are special requisites, to which mere picturesqueness must be sacrificed, if necessary. For portraits of old persons, however, an arrangement of strong light and shadow is sometimes pleasing.

In ordinary figure studies, there is no necessity for giving particular attention to the actual individuality of the model, the aim being to produce a pleasing and effective picture, not a precise likeness. The artist poses and illuminates the figure with sole reference to how it will best illustrate that which he has it in his mind to represent, — a street beggar, a workman at labor, or whatsoever his chosen theme may be, — and does not concern himself with any peculiarities of the model which do not have a bearing on that particular subject. Posing a sitter for a portrait, however, is quite a different matter. Everything is then calculated with the idea of bringing into favorable prominence the personality of the model. An attitude is selected in which defects are obscured and beauties are made more evident; the light is so arranged as to show the features to the best advantage, and the coloring of the drapery and background is made entirely subservient to the interest of the face and form.

Individuality is often as marked in the turn of the head, the inclination of the body, and the gen-

eral carriage, as it is in the countenance, and care should be taken not to pose the sitter for a portrait in an uncharacteristic position, even if it be otherwise suitable. Persons who have no self-consciousness, or who are so accustomed to the thought of being looked at that it does not disconcert them, usually fall into any required position easily and naturally; but with the average sitter, there is often some little difficulty to overcome, such as stiffness, or a set, artificial expression, and it is not easy to at once ascertain what is the natural manner and aspect. In such a case, it is better not to attempt to settle the pose at once, but to incite the model to move about and converse. Characteristic attitudes and expressions will thus be unconsciously revealed, and the painter may study them and decide what is most desirable, before the sitter is aware that the question of the pose has been considered at all.

When more than the bust is shown, the hands are usually included. Both hands, or neither, should be introduced into a picture, as, if only one is seen, there will be an uncertainty as to the existence of the other. Some portrait painters make a practice of departing from the truth as soon as they leave the face, and of idealizing the hands and arms of their sitters beyond recognition. This is a decided fault, no matter how artistically the

work is done. There is as much personality in hands as there is in faces, and in many cases, the hands are of great assistance in giving character to a portrait. The fact that the hands and arms of the Venus de Medici are beautiful, is no more reason for using them as models in the portrait of a modern woman, instead of the woman's own hands and arms, than the fact that the statue's face is beautiful, is a reason for substituting it for the woman's face.

The action of a figure, human or animal, is shown first by the outline, and then by the modeling of the muscles. The pencil outline defines the form, and is the first step toward making a picture, modeling being a matter of light and shade, and not of line. It is best to block in roughly the general proportions and attitude of the body, before perfecting the drawing, regarding it as a whole first, and indicating the details of the contours afterward. This method of working gives more freedom and vigor to the figure — more "snap," as artists say.

As it is highly necessary to keep the paper perfectly clean and fresh for water color work, the preliminary sketch would better be made on another piece of paper, and transferred to the actual surface after it has been perfected. The best means for transferring it is to lay a piece of tracing paper

over the sketch and trace it accurately with a rather hard, finely pointed pencil, then to turn the tracing paper over, and follow the lines of tracing on the wrong side with an HB pencil. When this is done, if the tracing paper be laid right side up on the water color paper, firmly held so that it will not slip, and the tracing be followed over again with the hard pencil, the sketch will be transferred to the water color paper so clearly that there will be no need of strengthening it. So comparatively long a process can be adopted only when there is ample time, and the model poses continuously, or repeatedly. For rapid water color sketches, the figure must be drawn directly on the paper, with light, delicate strokes of a hard pencil, and all the construction lines must be cleaned off with a sponge rubber before painting is begun.

The lights and shadows on flesh are always gradual; not only because it is without high gloss, but because it is somewhat translucent, and light sinks into it. Care must be taken to avoid all sharp, cut shadow edges, for in reality none such occur, and if the shadows are thus represented, they will look solid and stony. On the other hand, they must not be softened away into formless woolliness, as meaning and character will then be lost. Every variation of light and shade on the body, is shaped by the underlying muscles, tendons, or bones.

When this fact is overlooked or ignored, in the modeling of a human figure or of an animal, the result is an appearance of bloated puffiness which does not in the least resemble the delicate but firm gradations of nature.

The color of the clothing or drapery of figures, in a composition, is decided by the greater or less importance of the station they occupy, their distance from the spectator, and the exigencies of the general color-scheme. The arrangement of tints in the attire of single figures is usually such as will make the picture attractive as a whole, without special reference to the individuality of the model. The coloring of clothing in portraits, however, must be governed entirely by the complexion and character of the subject. It must be subordinate to the face and head, setting them off to advantage, but not asserting itself. An elaborate delineation of a tailor's or dressmaker's masterpiece carries the eye and mind of the observer quite away from the wearer, and the portrait becomes, practically, simply a picture of clothing.

Drapery of any kind should never be treated in a spotty way; that is, it should never have a great many lights all of the same value. The highest light should be concentrated where it belongs, in the prominent parts of the picture, and

elsewhere the value of the lights should be diminished. In order to prevent a sharp contrast between the flesh and the clothing, which might give an effect of hardness, many artists interpose white at the neck or shoulders and around the hands or arms.

Different materials have different textures, and take the light differently. While it is never desirable to work up the drapery to minute finish, the nature of the fabric should be clearly indicated. Silk is full of small, broken lights, while satin has a richer, broader, although still brilliant, surface. Woollen goods is usually lustreless, and the folds are round and gradual. Velvet has the peculiarity of catching the light on the edges of the folds, a dark shadow appearing in juxtaposition. Linen and cotton hang straight and limp, often with many small wrinkles.

A picture is always more satisfactory if the three primary colors are suggested in it. They may not all be brought into evidence, but the eye should be conscious that they are there, in a more or less modified form. Drapery and backgrounds are the means of introducing the required tints into portraits. It is always undesirable to use large masses of cold color. When cold color appears, an amount of warm color should be opposed to it, sufficient to counteract it.

All colors are employed in figure pictures, generally speaking, but all are not utilized for painting flesh. It is not necessary to recapitulate drapery and background colors, because there is a wide range of choice where they are concerned; but mention will be made of those suitable for flesh and hair.

The shadows upon the face and body are not all pink, nor are they all of one prevailing color. There are red, blue, purple, green, brown, and gray shadows, even when the surface is not affected by color reflected from the clothing or background. The strong shadows are warm, the most delicate are grayish, and all have a soft, grayish edge, which graduates the modeling and renders harshness impossible.

No matter in what light the model is posed, there will be no masses of dense, non-luminous shadow upon the flesh, because the face and body are not a flat surface, but are full of curves, which break the uniformity of shadow by reflected lights. All shadows on flesh are transparent, and all reflected lights are warm.

Indian Yellow, Yellow Ochre, Indigo, New Blue, Rose Madder, Light Red, Indian Red, Brown Madder, Burnt Sienna, and Vandyke Brown, are used for flesh painting, some alone and some in combination. Indian Yellow and Light Red to-

gether will give flesh colors and reflected lights; Rose Madder and Light Red together, the rosy tints; Rose Madder and Brown Madder, the shadows for nostrils, ears, and lips; Indian Red and New Blue, the general shadow color; New Blue, the small blue shadows; New Blue and Indian Yellow, the greenish shadows; and Indian Red alone, the red shadows. Burnt Sienna and Vandyke Brown enter into dark complexions.

The iris of blue or gray eyes may be rendered by a mixture of New Blue and Sepia; the iris of dark eyes, with New Blue and Vandyke Brown. The pupils, eyelashes, and eyebrows are indicated with Sepia.

Yellow Ochre gives the local color for fair hair; Vandyke Brown and Sepia, that of brown hair; while Sepia alone is used for the local color of black hair. All hair may be shaded with Vandyke Brown and Sepia, alone or in combination, although the lights in black hair are sometimes bluish or purplish. The point of high light in the eye is given with Chinese White.

While in small, rapid figure sketches, and in compositions where a number of figures appear, the flesh may be painted in flat washes, in portraits and large studies of single figures, the color is mainly hatched or stippled on, to give texture and transparency. In all cases, the main shadows

are blocked in with flat color before the general flesh tone is applied.

Hatching means laying on the color in short strokes, which are afterward crossed at a moderate angle by other short strokes. The first set of strokes must follow the grain of the flesh, and the second set must never be made at right angles with the first. The hatching should be left rather open, but not coarse.

Stippling is putting on the color with the point of the brush, in minute dots.

The first thing to be done, in painting a face or figure, is to wash in the shadows in their proper colors, and in the proper depth of tone. The eyes, brows, and lashes may also be placed, the latter not as separate hairs, but as a shadow. The color of the lips is likewise put in, but it is stippled, not washed. When the shadows are dry, the general flesh tint is washed over them. The large masses of the hair are then modeled with flat washes, but no lines.

The flesh tint is next carried over the face or figure again, but is hatched, not washed on, and all other subsequent work on the flesh is either hatched or stippled. The shadows are strengthened or modified where such alterations are necessary, the local color of the hair is washed on, the color of the cheek is put in, and finally the details

of eyes, lips, and hair. The latter should be kept in masses, and not made wiry with multitudinous lines.

In many of the gray shadows, the effect is obtained, not by mixing the red and blue together, and applying them in one tint, but by hatching them in separately, the red first and the blue over it; but everything must be soft, no violent tones being permissible in flesh.

The eyes of animals are painted like those of human beings; and what has been said of hair will apply also to all rough-coated creatures. The direction assumed by the hair of animals is largely influenced by the curves of the body, and this influence is more or less evident even when the coat is long and shaggy.

Short-haired animals are often so glossy that the high lights upon them appear almost blue, and are very sharp and distinct, as in silk. Great care must be taken to keep them of the exact form seen in nature, as they indicate the prominent modeling of the body. On woolly animals, like the sheep or camel, the high lights are broad and diffused, and have no scintillation.

The pigments used in animal painting are mainly rather dull. Indian Yellow, Yellow Ochre, Indigo, French Blue, Purple Madder, Light Red, Burnt Sienna, Vandyke Brown, Brown Madder, Brown

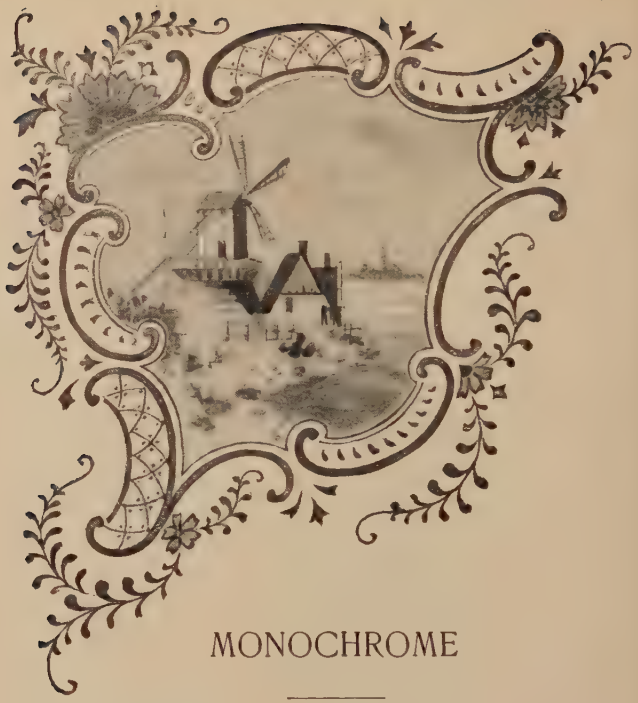
Ochre, Sepia, and the Umbers compose a useful list. It is hardly necessary to say, that the animal painter must have some knowledge of landscape work, as landscape backgrounds are often required.

For fish — which are usually represented as dead — and birds, both dead and living, brighter colors are needed. Many birds are very brilliant, while the great beauty of fish lies in their vivid spots and stripes, and the play of rainbow colors on the skin or scales. It must be remembered that in delineating either scales or feathers, the main shadows and modeling, and the definite colors, should be placed, before any attempt is made at rendering the details of texture. The fibrous nature of the feathers, and the overlapping of the scales, are not to be indicated with equal distinctness all over the body, but only at the parts where such minutiæ are most obvious — that is, on the light portions nearest the eye of the observer.

The student may often detect mistakes of drawing and modeling in his work by placing it opposite a mirror, and looking at the reflection, which, being reversed, will present the subject in a new aspect, and bring into evidence errors to which his eye has grown accustomed in the actual picture.

Finally, in painting either figures or animals, the

form and action are to be rendered with vigor, the colors kept pure and clear, even when they are subdued, and the shadows made simple and transparent. Nature is the best master, and faithful observation is worth a volume of precepts.



MONOCHROME

MONOCHROME painting, although guided by the same general principles as Polychrome painting, is yet often adopted as a profession by itself, and many artists confine themselves to the use of one pigment, instead of employing many, making a specialty of illustration and kindred work. The one pigment chosen for monochrome effect is by no means necessarily black, although black is used in the majority of cases, because it is best suited for

purposes of reproduction — and most monochrome work is intended for reproduction, usually by photo-engraving. When a man paints a picture, merely as a picture, without reference to its ultimate destination, he naturally employs a variety of colors; but when he paints a picture with the specific aim of illustrating text, he chooses monochrome, for the reason that it is far more easily and correctly reproduced in black-and-white than is polychrome. When the only method of reproducing was by hand engraving, this was of less consequence; but hand engraving is very expensive, and has been almost entirely superseded, for ordinary purposes, by photo-engraving.

A photo-engraving of a many-colored picture has, in the main, the same characteristics which a photograph of it would have; that is, the actual, positive colors are rendered in black-and-white just as they would be rendered in a photograph, and a photograph gives the values of colors with great inaccuracy. The most glaring example of this inaccuracy is seen in respect of yellow, which is, in itself, very conspicuous and vivid, and characteristically tends to come forward toward the eye. In a photograph, however, yellow appears black; while clear blues, which are far less prominent by nature, assume a lightness and brilliancy which do not in reality belong to them.

When an artist paints a monochrome picture, he takes pains to show the relative value of actual colors, although he does not use the colors themselves. If he represents both yellow and blue flowers, he makes the yellow ones lighter and more noticeable than the blue ones, as they truly are, and in the reproduction of his picture by photo-engraving, the values remain as he has indicated them, instead of being altered, as they would be if the real colors were used in the original.

The special suitability of monochrome for ordinary illustration, is therefore evident. This is, indeed, its main purpose, and black-and-white monochromes are those most generally seen. Green, blue, red, and brown are also used for monochrome work, however; notably for the outside decoration of magazines and pamphlets, less frequently for illustrations in art publications. They are likewise employed in making designs for the ornamentation of china and other articles.

Among the examples of colored monochromes most often encountered, are those in the Delft style. The characteristic blue or green is employed, — for there is green Delft as well as blue, — and the general peculiarities of the figures, landscapes, and conventional decoration seen on the actual pottery are, or should be, carefully preserved.

The designs for book-covers are also frequently made in monochrome, the color selected being such as will best harmonize with the color of the cover, a darker or lighter shade of the same color being commonly chosen. In a book-cover design, however, the work is much broader and simpler than in designs for china and similar objects, because the surface for which it is intended is not susceptible of fine and delicate treatment of light and shade.

In ordinary monochrome work, the manner of rendering is the same, no matter what color is employed. The high lights are left white, or are faintly tinted, and the deepest shadows are represented by the darkest shade of the color. The method of procedure varies according to the subject selected, — flowers, landscape, or figure, — and the general treatment is like that of polychrome.

The element of technical design, however, often has to be considered, and sometimes enters even into illustration, which is the most important branch of monochrome. The word *design* is used to express the adaptation of artistic representation to a special, practical, decorative purpose ; and although illustration is not really designing, and in many cases has no connection with it, but is simply a making of pictures to explain some situation or

condition suggested in the associated text, it may, again, partake largely of the character of design, while still maintaining a connection with the letter-press, and carrying out an idea contained therein. Take initial letters, for example. They are frequently given ornamental value at the beginning of a chapter, and while sometimes they have no application to the reading matter save as they represent a necessary letter, the most pleasing ones are those which contain elements suggesting the leading event or purpose of the chapter. A suggestion is all that they can contain; for the limit of size and the need for bringing the alphabetical character into prominence, as well as the general decorative requirement of the page, demand a certain amount of conventionality, and do not allow of the working up of the idea in a definite and conclusive way. In fact, the quality of suggestiveness is the chief charm of an initial letter — it should be a hint, not a revelation.

In decorative chapter headings, more latitude is permissible. The alphabetical motive being absent, the decorative idea is less limited in application, although, as in an initial letter, it may be purely conventional. A chapter heading is, however, more satisfactory, if the mind, as well as the eye, is gratified, and an intimation of the main theme of the text is embodied. The general treatment may

be entirely ornamental, or may be entirely natural, within the limits prescribed by the size and shape of the page, and the proportionate amount of space allotted to decoration. The arrangement of an initial letter or a chapter heading, and the area it occupies, must be calculated with reference to the appearance of the page as a whole, because, after all, illustration of any kind is secondary to the text it illustrates, and that text has the first claim upon attention and consideration. When an artist wishes to elaborate an idea conveyed in the reading-matter, and to represent the exact situation described, he abandons the decorative intention entirely, and makes a picture of the scene, not a chapter heading nor an initial letter; and this picture is placed in juxtaposition to that portion of the text to which it applies.

Chapter headings may extend quite across the page, or may be confined to one side; they may be oblong, triangular, or irregular in shape; they may have a definite background, or none at all; in fact, the artist's fancy has full play, within the proper limits and proportions, and he may introduce many effects which would not be admissible in a picture, where simply suggestive decoration is not the guiding principle, as it is in chapter headings, initial letters, and tail-pieces. Pictorial illustrations are, however, subject to the same conditions of form

and composition which are essential to good pictures of any kind.

What has been said of the intention of chapter headings will apply equally well to tail-pieces. While it is true that they are often purely decorative in character, and have no connection, however remote, with the text, it is more artistic to put into them some suggestion of the preceding reading matter, or the general subject of the book, or to allow them to hint at finality.

The first thing to be considered, therefore, in making a chapter heading, an initial letter, or a tail-piece, is the subject of the chapter or volume. The next is the general proportions of the page; that is, its length, width, and actual size. Wide margins and large, open type add much to the attractive appearance of a page; but these advantages are usually allowed by the publisher, as a matter of course, in a book for which the expense of illustration is incurred, and the illustrator is justified in calculating upon them. The chapter heading must conform to the limits of the page; that is, it must be complete within those limits, and must be so arranged that it gives no impression of having been chopped off or pared down in order to make it fit in. It should be of a shape and size to decorate the page, not monopolize it, and it should not crowd the letter-heading into obscurity. There

are no iron rules as to the amount of space to be occupied, for chapter headings are of shapes too numerous to mention ; but, on general principles, it is advisable that the decorative heading for prose work should not take up more than half the page, exclusive of the letter-heading, and usually it should occupy less. Initial letters vary much in size, but should be kept in proper proportion to the type employed for the text, and should not be made too important. Tail-pieces are smaller than chapter headings, and are placed in the middle of the page, as distinguished from one side. They are seldom longer perpendicularly than they are horizontally. If they suggest the idea of termination, so much the better, although this is not a necessity. When tail-pieces have no application to the chapter they follow, or to the main topic of the book, they are usually more or less conventional, and serve simply as an ornament to the page, placed there to gratify the eye alone, not to carry out any mental association.

When the illustrations are not of a decorative character, but are pictures in themselves, they may claim as much space, within the limits of the page, as is necessary for the adequate representation of the subject.

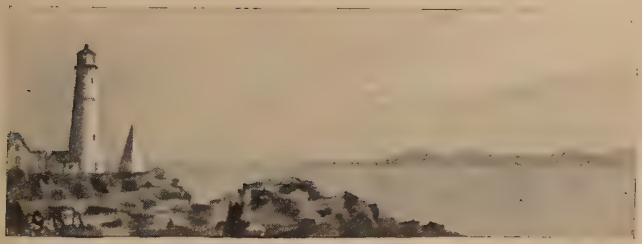
Illustrations are nearly always reduced in size when they are reproduced, the dimensions of the

printed picture being usually about one-third those of the original. This diminishment naturally makes the work appear finer, although, when the original work is very minute, it causes detail to vanish utterly. The reduction to one-third the given size is by no means an absolute rule, however, for it is possible to reduce a picture to any desired limit. In making illustrations, the artist ordinarily allows himself three times the actual measurements of the space allotted for the reproduction, simply because it gives him room to work with more breadth and freedom; and he avoids minutiæ, knowing. that when the illustration is reduced in engraving, its delicacy of appearance will be much enhanced, and that if it is too fine in the original, there will be a lack of character in the reproduction.

Tube colors are to be preferred for monochrome painting, because they are soft, and work easily, and the objection of bulk does not hold, since one tube occupies but little room. Lamp Black is a desirable pigment for black-and-white work; Sepia yields a cool brown, Burnt Sienna a warm brown, and both are pleasing in monochrome; Indian Red gives satisfactory red effects; Indigo and French Blue, in combination, are suitable for blue Delft designs; while Indigo and Hooker's Green No. 2 make a good green Delft color.

Work intended for reproduction should never

be folded. It may be rolled, if it is very large, but preferably it should be kept flat. When it is sent by mail, it should be placed between two pieces of stiff pasteboard, or if it is rolled, in a strong mailing tube.



DECORATION

ALTHOUGH Decorative painting is not, strictly speaking, a branch of water color painting, in the artistic sense, there are many beginners and amateurs who like to turn what knowledge of painting they possess, to practical account in making or ornamenting articles for holiday presents and other purposes; and a short chapter will be devoted to the consideration of such work, quite aside from the making of pictures and sketches, as such.

The principles of decoration are somewhat different from those of picture composition and coloring. In pictures, the picture itself is all in all. It claims attention as a representation of some-

thing, without reference to anything outside its own limits. In decorative work, the conditions are quite otherwise. The painting is secondary in importance to the object decorated, and is influenced by the shape, surface, and purpose of the latter. In order to be appropriate and artistic, it should be kept subordinate, adapting itself gracefully to all the practical conditions of the situation, and should never be suffered to assert itself as a picture instead of a mere ornament.

The arrangement of flowers and figures in decoration must, therefore, be guided by the shape of the object they decorate, and must conform to it in such a way that the ornamentation seems to be its natural adjunct, not a forced and unadaptable addition. Landscapes are less amenable to conventional treatment, and thus are not so frequently employed for purely decorative purposes, although they, too, have their value in ornamentation.

In order to be effective, painting intended solely for decoration should never be extremely fine and minute, nor should it display startling contrasts, — unless, indeed, it is all contrast, like a black design on a white ground, — for in both cases, it detaches itself from the object decorated, and demands attention on its own account, thereby ceasing to be a mere decoration, and becoming, or tending to become, a picture. A valuable decorative hint is

afforded by *chiné* silks, — those silks in which the design appears frayed out and foggy, upon close examination, being blent in with the fabric so that its lines and details are indistinct, while its ornamental value still remains.

As an illustration of what is meant, a painted calendar may be chosen. Assuming that a large, oblong water color card has been taken as the foundation, the largest diameter of the card being horizontal, and the actual calendar — the months, days, and numerals — being placed in the lower right-hand corner; the left-hand end of the card, the upper left-hand corner, and the top will present the space for decoration. As a floral motive is usually selected, because it is most effective in an ornamental way, wild roses may be considered the theme of the design on the calendar, since they are a pleasing and adaptable subject. The main group — a cluster of leaves and flowers — is placed in the upper left-hand corner, and from it, sprays trail away along the upper edge of the card and toward the lower left-hand corner. These sprays diminish in importance, that is, in size and in strength of color, until they lapse to a natural termination. The colors employed, while very bright and clear in quality, are, nevertheless, kept pale and misty; few gray and dark shadows are used, and no sharp effects of light and shade are introduced;

not because such effects do not occur in nature, but because they are not suitable to the decorative purpose. Decoration is a suggestion, not a delineation, and this difference between a decoration and a picture should always be borne in mind.

To return to the calendar; the upper left-hand corner, as affording the largest space, holds the nucleus of the design, the flowers and leaves placed there being painted with more strength and distinctness, while the others decrease in force of color and detail as they recede from the chief cluster. The tint fades off more and more toward the extremities, so that there is no sense of abrupt cessation.

The adaptation of decoration to the space to be decorated must never be forgotten. If the space is irregular, the grouping must be irregular, in accordance with it. If a corner is to be ornamented, the ornamentation must be arranged so as to fit in naturally, without appearing to be forced into the required shape. On circular objects, the design should follow the curve. Figures, landscapes, and marines are less often employed for the adornment of articles of arbitrary form than are floral and conventional motives, because they are less conformable, and have more the character of pictures than of simple decoration; but for square or oblong, round or oval spaces, they are entirely suitable.

Among conventional motives, scrolls of various sorts are the most important. They may be used alone or in combination with flowers, figures, or landscapes. Delft designs are generally surrounded by scrolls, conventional flowers being also frequently added. As some knowledge of the technical theory of ornament is necessary for the invention of correct and pleasing scrolls, it is more advisable for an amateur to avail himself of a ready-made scroll, adapting it to his purpose, than for him to attempt to produce something entirely original. Scrolls are to be found everywhere, — on book-covers, in wall papers, in carpets, even on tradesmen's wagons in the street, as well as in books devoted to decorative art, — so he need never be at a loss.

Figures painted in flat tints, without shading, are often effective in an ornamental way. They must be graceful in shape, and as there is no modeling in them, a heavy outline is usually necessary in order that the contours may be defined. Many children's books have colored illustrations in this style, and hints may be obtained from them.

Metallic paints are frequently made use of in ornamentation, but they must never appear in combination with realistic treatment. For scrolls, conventional designs, and lettering, they are perfectly suitable; but introduced into landscapes,

figures, or natural flowers, they are anomalous and inartistic. The best metallic paints for the water colorist are those which come in the form of fine powder. They should be mixed with a strong solution of gum arabic, the mixture being made as thick as is consistent with its smooth application by the brush. If the proportion of gum arabic is too small, the metallic powder will loosen and fall off as soon as it is dry, but if enough of the gum is used, it will hold to the surface permanently.

All letters and numerals should be made with great accuracy, for they are arbitrary symbols, and any incorrectness in their shape or spacing is always obvious and displeasing. Books of the standard ornamental alphabets are to be obtained of any dealer in art materials, and a little practice will enable the student to change the size and the details of the letters to suit himself, without losing their character.

It is, of course, quite impossible to enumerate the objects suitable for water color decoration. Those made of paper and pasteboard first suggest themselves, — calendars, menu and guest cards, boxes, and photograph frames. When photographs are placed in a wooden frame, with a mat, the mat is sometimes painted, the decoration being kept very delicate so as not to usurp the importance which rightfully belongs to the photograph. Silk,

satin, leather, kid, glazed linen, and wood also take water color well, the scheme of ornamentation and the method of treatment being decided by the purpose for which the article is meant and the surface which is to receive the paint. Sachets, jewel, glove, and handkerchief boxes, book-marks, blotting-books, pin-cushions, fans, hand screens, satin bags, and many other objects, of various materials, afford scope for the decorator's ingenuity.

When the surface to be decorated is white, or is lighter than any tone to be employed in painting on it, being yet of the same prevailing tint as the proposed decoration, transparent or semi-transparent colors, such as have been spoken of throughout the foregoing chapters, may be used. For working on silk and similar fabrics, the brush must be kept rather dry, to prevent the color from soaking and spreading. In cases where the surface is colored to begin with, however, and paler or entirely different tones are to enter into the decoration, body colors must be employed, because they are opaque, and will not be changed by being put upon a ground darker than themselves, or of an opposing tint. For example, if a pale violet-colored sachet is to be ornamented with a design of deep purple violets, there is no need of painting them in body color, because the darker purple will go on

over the lighter in an entirely satisfactory way; but if it is to be ornamented with white or yellow flowers, body color is indispensable.

These opaque colors are to be obtained in tubes at all art material shops. No list of them is given here, because the student need buy only what he requires for his special purpose, and his general knowledge of pigments will guide him in making a suitable selection.

Silk, satin, and kid, in pale colors or white, are appropriately decorated with delicate floral designs or Watteau figures; paper, pasteboard, and linen, with flowers, colored landscapes, and blue or green Delft designs; leather and wood, with conventional patterns and landscapes in monochrome. These are simply suggestions, not rules to which the painter must conform, and any person with a taste for ornamental work, will think of many changes, variations, and effective combinations and novelties.

There are some essential points which the decorator must remember, however, and one of these is cleanliness. If an article becomes soiled in process of ornamentation, its beauty is gone; so great pains should be taken to guard it from dust, moisture, and spatters of paint. Another point is accuracy of touch, because in many cases the working surface is of such a nature that mistakes cannot be corrected. Still another is delicacy and purity of

color, muddy painting being a blemish instead of a decoration.

Whatever the style of the design, it must not be so full and heavy that it overburdens the object upon which it appears, but must always be in reasonable proportion. Last, but not least, a simple, but well-arranged decoration is worth infinitely more than an elaborate, ill-managed one, and the amateur need never involve himself in difficulties under the impression that complexity is the chief beauty of ornament.

COMPOSITION

THE arrangement or composition of a picture is usually of so great difficulty to the student who is just beginning to work from nature, or from the actual object, that it is deemed desirable to give the matter special attention, as a department of knowledge by itself, quite aside from any question of mechanical color-handling. A man may understand composition, if he studies the subject, even though he never touches pencil nor brush. The tableaux of all theatrical representations are arranged upon the same general principles which underlie the composing of a picture, and their effectiveness is produced by an application of the

same laws, not so rigidly adhered to, however, because the tableau is a transitory thing, while the painting will last.

Whoever had the good fortune to see Miss Mary Anderson in "A Winter's Tale," must have indelibly printed on his memory the exquisite series of pictures given in the play; and every one of those pictures was the result, not of a fortunate accident, but of long study and preparation. The groups were arranged, and the individual characters posed, as carefully as an artist poses models for painting, and with the same purpose in view.

The dictionary definition of the word *composition* is, "The art or practice of so combining the different parts of a work of art as to produce a harmonious whole; also, a work of art considered as such. An artistic production . . . showing study and care in arrangement." This definition may not be plain to the inexperienced student, who has, perhaps, the idea that flower, landscape, and figure artists represent what they see, exactly as chance happens to direct the grouping or attitude. This idea is erroneous, for, in reality, something is necessary to the making of a good picture besides a knowledge of color-handling and an understanding of light and shade. The items of which the picture consists, must be so put together that they compose one "harmonious whole," each item being

so dependent upon the others that it could not be omitted without its loss being felt, and yet no item assuming more importance than belongs to its rightful position. Composition does not mean the simple bunching together of detached objects; it means the establishing of a relation between them so strong that it will prevent the picture they compose from being divided into different portions, each one of which is a complete picture itself, regarded separately from the rest. It is the interweaving of many individuals into one individual whole.

For example, if an artist wishes to represent a handful of flowers lying upon a table, he does not fling the flowers down and paint them just as they happen to fall, without regard to the position they chance to take. It is comparatively seldom that accident combines objects in such a way that they will be entirely satisfactory to the mind and eye when reproduced in a picture. In literature, the necessity for shaping a story, for bringing certain characters into prominence and keeping certain others subordinate, is universally recognized; and the same necessity prevails in the composition of a picture. If every part of it is made equally important, the attention of the spectator will be distracted from one place to another, and will never be concentrated at any one spot; whereas,

if the artist establishes one point of special interest, and keeps the others subordinate, the eye will direct itself to the interesting point, and rest there, satisfied.

There is a difference between a simple sketch and a picture. A sketch is merely a suggestion, an informal, comparatively incomplete thing, which makes no pretensions to presenting a complex thought, or an idea carried out to the extreme limits of artistic expression. The question of composition does not, therefore, enter into the making of sketches, which may permissibly be quite fragmentary. The artist jots down an attitude or an effect of light and shade that pleases him, and having caught it, the work is finished, as a sketch. Such sketches may be turned to account in composition later on, but they are not compositions in themselves. The term *composition* implies the introduction of more than one element, and the disposal of these elements in such a way that they shall form one pleasing whole, instead of a cluster of independent items. A sketch may be the idea for one of the elements, but a composition necessarily includes the general idea for a complete picture. Take, for example, a painting of a battle scene, with cavalry charging, an officer leading, and dead and wounded men upon the ground. When the artist is planning the picture,

he makes separate sketches of every one of the figures and animals, which are simply individual studies of attitude, made with reference to the place they are to occupy in the painting; but when he combines his sketches and forms them into groups, and then arranges the groups so as to suggest his full idea of the scene he desires to depict, he makes a composition.

The main rules of composition are the same in all picture painting; but decorative composition is somewhat different, for it must necessarily be governed by the object or surface to be decorated, its shape, size, and purpose, the distance from which it is to be viewed, its texture, and many other considerations. Decorative composition will not be discussed here, because it belongs more especially to the department of decorative art, while this book deals chiefly with sketching and picture making.

In composition, the arrangement of form and the arrangement of color both have to be regarded. In black-and-white pictures, the idea of positive color is, to a certain extent, eliminated; but relative color — that is, whether the local tint of a thing is light, dark, brilliant, or dull, in comparison with other things in the picture — remains to be considered. The idea of contrast is the basis of painting, in either polychrome or monochrome.

The first thing to be thought of in making a picture, is the selection of an interesting subject. It may be interesting because of its beauty, picturesqueness, sentiment, meaning, or dramatic possibilities, but interest of some sort it must have. In pictures of flowers, the interest lies in beauty of color and form, and grace of arrangement, and the same may be said of representations of dead game and fish, although a corpse of any kind is not, strictly speaking, a beautiful object. If a picture of a slaughtered deer is at all pleasing, it pleases only by virtue of what poor resemblance the dead body retains to the appearance it presented when it was alive. In pictures of landscapes and marines, sentiment and picturesqueness are additional elements of interest, while in pictures of figures and animals, all the qualities mentioned may enter, and the interest of action besides.

A composition consists of a subject and accessories. The subject is the main feature of the picture, and exemplifies its leading idea, while the accessories carry out the sense, and complete the general arrangement. The accessories, although of great importance with relation to the subject, are of no importance in themselves, comparatively speaking, and should never be permitted to come into such prominence that they distract attention from the subject. The essential thing in

composing a picture, is to so arrange it that the eye of the observer is led to some one part of it, and rests there, instead of wandering from one place to another, and remaining nowhere; and the proper part of the picture to form this resting-place for the eye, is, of course, the chief feature. For example, if a painter makes a picture of two men wrestling, and so manages his color, light, shade, and general lines of composition, that the eye is irresistibly attracted to a stone or a flower on the ground, instead of to the men's figures, he destroys the effect of his work, because he concentrates attention on an unimportant detail, and so leads it away from his actual subject. The mental consciousness on the part of the observer that the wrestlers are meant to be the main feature of the picture, will not prevent his eye from being drawn away from them, if a subordinate feature is brought into greater prominence, because the eye is attracted to any object possessing brightness of color, strong contrast, or a conspicuous situation, irrespective of the inherent importance of the object itself.

When any minor detail of a picture is thus brought into too great evidence, asserting itself in such a way as to usurp attention, it is said to be a "noise," or to be "noisy." When no one part of the picture is made especially important, but

every part is of the same value as the other parts, all equally demanding attention, the picture is called "scattered," and is always unsatisfactory in effect, for the eye wanders hither and thither, and is not able to remain fixed upon any one place, because it is attracted just as strongly somewhere else. In order, therefore, to produce a "harmonious whole," which is the essential result of good composition, the artist must use every means in his power to carry the eye of the observer to the subject of his picture, and to make that its instinctive resting-place.

The worth of bright color, contrast, and definiteness, in riveting attention, has already been explained in the chapter devoted to Flowers, Fruit, and Still Life; but there is also another method of drawing the eye to a particular part of the picture, which has not yet been mentioned; and this method lies in a suitable adjustment of the general lines of the composition to the purpose the artist has in view. The word *line* is not here used in the sense of an actual, geometric line, but simply to express the tendency of direction; as, when a number of objects are placed in a row, they are said to be *in line*.

The skilful artist will, therefore, arrange the lines of his composition in such a manner that they will direct the eye to the desired spot, but in

so easy and natural a way that it is not conscious of being guided, although, in reality, it is obeying his wish. There are several means of thus compelling the eye, and they are all based upon a few simple elementary principles.

One of these principles is, that the eye is attracted to the centre of a circle, rather than to any part of the circumference. The student may prove this to his own satisfaction by drawing a circle on paper with a pencil. His eye takes in the circle as a whole, and is not held by any one part of it; but if he places a dot in the middle of the circle, his eye immediately fastens itself to the dot, and returns to it instinctively if he glances away toward the circumference. It will consequently be seen, that when the general lines of a composition have a circular tendency, the eye will be carried toward the centre, and it is there that the principal object or group of objects should be placed. There are few errors in picture arrangement more glaring, than to give the general lines a circular suggestion and then leave the centre blank and uninteresting. The eye is led to the middle only to be disappointed.

Another principle is, that the eye instinctively goes to the point where lines converge. If three lines are drawn, radiating from a common centre, the eye will fix itself upon the centre rather than

upon the lines; or if two pencil lines are drawn, forming an angle, the eye will rest at the apex of the angle in preference to any other part. Therefore, attention may be attracted to the subject of a picture by making the general lines of the composition converge toward it.

A third principle is that of isolation. If a dozen pencil dots be grouped close together on a piece of paper, and one dot of the same size and depth of color be placed alone, near them, but not in the group, the eye will fix itself upon the isolated dot in preference to the group of dots. In pursuance of this idea, the subject of a picture may sometimes be brought into prominence by isolating it, and placing it in opposition to a group of subordinate features.

It will readily be seen that while these principles are of the utmost value when properly applied, the disregard of them will lead to grave faults of composition. The inexperienced student, arranging his grouping more by accident than design, will often fail to notice the general tendency of direction that it is assuming, and so not succeed in bringing it into harmony as a whole. The eye will be led to the wrong place, or to no place at all in especial, and his picture will be unsatisfactory, although he may not be able to discern that the trouble lies in its bad construction.

The matter of composition is far more quickly made clear when good and evil examples, in the form of actual pictures, can be exhibited, and the errors and merits pointed out and explained. Failing that, however, the teacher can only outline the main ideas in words, leaving the student to work them out and apply them for himself.

It is much easier to tell what should *not* be done than what should be done. Any positive merit in a picture is usually the outcome of what is inherent in the artist, while negative merit may be simply the result of proper instruction. A student cannot be taught to express what is not in him, but he can be prevented from expressing wrongly what *is* in him.

It has been said that the eye follows the general lines of the composition to the spot where they tend to converge, and that these lines should, therefore, be arranged so as to converge toward the principal feature. If the lines are too obvious, however, and are long and unbroken, they will assume great importance in themselves, and force the fact of their existence upon the spectator. To avoid any such bald display of the elementary plan of construction upon which the picture is based, these lines must be arranged in such a way as not to appeal to the eye as lines, but simply as a general tendency, felt rather than seen. They should

never be allowed to remain continuous, but should be broken as much as possible. This advice holds good with regard to all long lines in a picture, whether they are straight or curved, and whether they converge or not.

For example, take a simple study of a branch of dogwood blossoms, extending upward across the paper from left to right. The general line of arrangement is, of course, one which runs obliquely in that direction; but while this tendency is felt, the line is, nevertheless, broken by twigs, leaves, and flowers, placed at different angles to it. This prevents the effect from appearing forced, as it would appear if there were no interruptions to break the continuity.

Everything about a picture should be insinuated, not obviously insisted upon. While a skilful artist really irresistibly compels the eye to go where he wishes, he yet seems to merely suggest the direction — he never lets his mechanism become evident.

Long, continuous lines are, then, to be avoided, especially in subordinate parts of the picture, since the eye is always attracted to them; and whenever the eye is attracted to a subordinate part, the principal part is correspondingly neglected. In the case of flower, fruit or still life pictures, having a horizontal plane and a background, the line divid-

ing the two should always be kept soft, and be interrupted as much as possible. While it should be lifted sufficiently high to allow ample depth of perspective for the placing of the subject, it should yet remain low enough to be well broken by the grouping. For instance, if a handful of roses is represented as lying upon a table, the surface of the table, or horizontal plane, must be allowed to extend back into the distance so far that the eye is aware that the roses have room to rest upon the level, with space to spare; but it should not be carried back to such a depth that the perspective lifts the horizon line quite clear of the group, and permits it to pass across the picture without interruption, for the line will, in that case, infallibly attract the eye away from the roses.

All lines, or arrangements, tending to divide a picture into mathematical sections, or obvious geometric forms, must be shunned. To so plan the general lines of composition that the picture appears to be cut into distinct halves, thirds or quarters, squares or triangles, is to produce a most displeasing effect. The painting ceases to be regarded as a whole; it is looked at in fractions, and the lines defining the fractions are the most conspicuous things in it.

Symmetry of grouping is to be avoided, as an aspect of stiffness and conventionality is an unfail-

ing result of too regular an arrangement of the lines of composition. While a certain amount of balance is necessary, it should be carefully calculated with reference to the ultimate shape of the general mass of the picture; and an item on one side should not be supported by a similar item on the other side in the corresponding situation and position. The sense of balance must be more subtly suggested, and the less evident symmetry and regularity there are, the better. Monotony and exact repetition weary the eye and mind, and make a picture uninteresting. A large, but unimportant feature in one place may be supported by a smaller, but more important feature in another.

No wide, empty spaces should be left in a picture. A gap in the composition destroys its unity, and is felt as a blank, even if it does not occur in a prominent situation.

The natural tendency of the eye, when uninfluenced by other considerations, is toward the middle of the picture. It is, therefore, desirable to place the chief object, or group of objects, somewhere in that neighborhood, rather than at the top, bottom, or extreme side. The exact middle, however, is not to be chosen, as the construction then becomes too symmetrical.

To so arrange objects in a picture that they may be divided into groups, each one of which forms a

separate and entire picture in itself, independent of the general sense, is bad construction. The groups should always be so placed that the picture holds together as a complete whole, each part closely related to the rest, and helping out the full meaning. In a flower picture, for example, which is composed of flowers in a vase or bowl, with other flowers lying scattered upon the table, it is always best to have the outline of the still life cut by the flowers lying upon the table, so that the vase, with its flowers, may not detach itself from the rest, and thus impress the observer as being an entire picture, with a separate individuality. When portions of a composition draw away from the rest and seem non-essential to the carrying out of the general meaning, or assume a meaning of their own, the picture is scattered and unsatisfactory.

The front view of any object is always the most interesting, therefore the subject of a picture should seldom be represented from the back. While side and back views are of great importance in making up a group, they do not equal the face in value; and the chief feature of a picture, whether the picture be of flowers, figures, or animals, is best placed with the face toward the observer. Moreover, nothing should be permitted to interfere with a clear view of it. A study of a group of flowers should be so arranged that no

stems nor leaves pass in front of the principal flowers, intervening between them and the eye of the spectator; otherwise such stems and leaves will usurp the chief place, and take on an importance that does not belong to them.

In flower pictures, those individuals which are close to the eye are usually the most important, and are to be treated as such, the forces of contrast, of brilliancy, and of detail being brought to bear, to give them prominence; but in figure, animal, and landscape work, the chief object of the picture is often farther back. The more distant it is, the less detail is permissible; but color, and especially contrast, are still legitimate resources for giving it due value.

The simplest form of composition is that illustrated by those studies of flowers which represent a branch, or cluster, supported by neither still life nor a horizontal plane. In such a picture, the flowers should be massed most heavily near the middle, and the interest should be concentrated on the individuals in the central group which are closest to the eye, those farther away being treated as of less importance, in proportion as they recede from the main group and from the spectator. When it is possible, the stems would better be permitted to extend to the edge of the picture, and be cut off by it; but when this cannot properly be

done, and the stems are broken inside the limits of the picture, so that the ends are visible, it is better to let them fade off to nothing than to stop them abruptly. Moreover, it is more artistic not to carry the background under the stems thus terminated. By ending the background when he ends the stems, the painter merely ceases work at that particular point ; for all the observer knows, the flowers may be in a vase, or may be growing on the plant itself, since the artist has not continued the representation far enough to decide the matter. If the background is carried below and under the broken stems, however, they are effectually cut off from any support, being detached from everything outside the picture, and left floating in the air. This effect is always displeasing to a cultivated eye, because it is untrue.

In the matter of grouping, no definite, exact directions can be given, obviating the necessity for the exertion of thought and judgment on the part of the student, because no two groups are, or should be, just alike. It may be said, however, that *grouping* in composition, does not mean simply placing certain items so that they are adjacent to each other ; it means bringing them into close relation, so that they cohere, and are regarded as a whole, instead of as separate individuals. In order to give this impression of coherency, the items,

whether they are flowers, human figures, animals, trees, or other objects, must be arranged in such a way that all are not equally distant from the eye, but are at different degrees of removal, and in different positions, some falling behind others, and none being definitely detached so that it does not come into connection with the rest, unless it is kept so subordinate in location and value that its isolation does not render it important, while yet it finishes or helps out the meaning.

Although isolation is sometimes resorted to as a means of forcing the principal object in a picture into prominence, this is usually done in figure and animal compositions, when dramatic effects are desired. Sometimes, however, an especially fine tree in a landscape is thus brought into notice. In flower pictures, the chief flower, or cluster of flowers, must be well backed up by other, less important, flowers and leaves, in different positions, so that there will be no impression of thinness nor poverty. While the principal group should face the observer, side and back views should be indicated among the subordinate flowers, to prevent the feeling that there is a blank side to the group, and that if the observer could go behind it, there would be nothing to see. Moreover, the middle of the group should never be open, so that large patches of the background are visible there, else a

shallow, flat effect will be given. No matter how many individual flowers are represented, if they are scattered over the paper like stars in the sky, each detached from the others, a feeling of scantiness and weakness will be produced. Although the edges of the group may be thin, the middle must be full and rich.

In representing figures and animals, they should be so arranged that no limbs appear to be missing. In real life, it often happens that a man stands in such a position that a person looking at him sees but one arm or one leg. It would be a serious mistake to reproduce such an attitude in a picture, however, because if the other leg or arm is not suggested in some way, there is no certainty that he possesses more than one; whereas, if a very small portion, a hand or a foot, is shown, the eye will be satisfied that the entire limb is there. In this connection, the student may be reminded that all the things he really sees in nature are not equally well adapted for pictorial representation; and that the skilful artist reproduces only such aspects of actual objects as are most effective.

In the case of large crowds, where many individuals are closely packed together, the complete figure of every one, or an indication of all his limbs, cannot, of course, be given, but the rule should be followed out in the figures nearest the

eye, the others being simply suggested, to give the effect of multitude.

The arrangement of landscape and other backgrounds which are not simply color-washes, should be guided by the arrangement of the subject of the picture, and should never be allowed to interfere with it. For example, if a deer is represented as standing in an open space, with trees in the distance, they should be so placed as not to distract attention from the deer, nor take away from his importance as the subject of the picture. If they are so situated that they diminish that sense of contrast which is requisite to bring the deer into prominence, they will be a defect in the composition, not an assistance. In case the trees are located behind the deer in such a way that the branches come into conflict with his antlers, one of the most striking characteristics of the animal will be rendered non-effective; whereas, if the trees are kept more toward the side, and the head of the deer is seen against a plain background of distant sky, mountain, snow, or water, it will retain the importance that rightfully belongs to it. It is quite true that a real deer does not always stand in such a way that his antlers are clear of the trees behind him; but the trained artist will choose the moment when he does, for depicting him. The fact that a thing sometimes appears under unsatisfactory

conditions in nature, is by no means a reason for representing it under those conditions in a picture. The subject should be painted in the aspect most favorable to it, and to the purposes of the picture in which it is placed.

Objects in the foreground should never be allowed to form a continuous line, but should be brought forward a little here, and thrown back a little there, to avoid stiffness and regularity.

Attention has been called, in previous chapters, to the comparative value of certain colors — the power of some to give prominence and nearness, and of others to give distance and vagueness. The various qualities of different colors, if they are properly managed, are of great aid in producing effects of roundness, depth, and perspective. For instance, if an artist is arranging a group of mingled pink and red roses, for painting, the appearance of roundness in his picture will be much increased if he places the majority of the light roses on the light side of the group, and the larger part of the dark ones on the shadowed side, allowing a light rose to occupy the principal position in the foreground. The values of the light and shade in the picture are thus intensified, and the foreground flower comes forward naturally; whereas, if the case were reversed, and the light flowers were massed on the dark side, while the dark ones

occupied the light side and the front of the picture, the comparative value of the light and shade would be much reduced, the light appearing less bright, and the shadow less deep. The dark roses, being assigned the conspicuous position, would yet not assert themselves sufficiently; while the light roses, holding the obscure position, would nevertheless assert themselves too much.

Reference has also been made to the frequent necessity of throwing back certain parts of a group by carrying over them a general wash of gray, or of the background tint. This should never be undertaken until the picture is well on its way toward completion, as in the early stages it is not possible to know just where the wash is needed, and how deep it should be. It is always easy to tone down a color, but it is not easy to tone it up again, if it has been made too dull; therefore the subduing wash should not be put on until the picture has progressed so far that the student is quite certain what the ultimate effect will be.

In undertaking a large or complicated picture, it is always best to make a rough study of the intended composition beforehand, on another piece of paper than that meant for the actual painting. This may be done with charcoal, the general plan of the picture being sketched in, and the proposed colors washed on in flat tints. In this way the

student obtains some idea of how the composition and color-scheme he has in his mind will work out practically, and where additions, omissions, and modifications will be necessary. When the sketch has been altered and improved until he is satisfied with the composition and coloring as a whole, he can use it as a guide in painting the picture itself. Thus he avoids the risk of making mistakes where they cannot be rectified.

Greater latitude may be enjoyed in black-and-white composition than in that where positive color has to be considered. Many arrangements which would appear to be patchy, if worked out in polychrome, are entirely harmonious in monochrome, because the element of color contrast is absent, and the composition is held together by one universal tint. For example, in making a color study of red flowers and green leaves, it would be so grouped that most of the flowers would be in juxtaposition, and form a mass of red, because if they were separated from each other, the effect would be thin, spotty, and unpleasant, the whole picture being broken up into scattered bits of contrasting color. A monochrome study of the same flowers and leaves, however, even if they were arranged in a somewhat scattered way, would present a comparatively agreeable aspect, because all the shades would be variations of the same color, and the picture would not be divided against itself.

Water color pictures are always mounted with a mat, which may be white, gold, or colored. It should never be less than two and a half inches wide, and may often be more. A suitable mat adds very much to the pleasing appearance of a picture, while an unsuitable one puts it at a great disadvantage. A dead white mat is seldom so satisfactory as a mat of a cream or grayish tone, because it takes away from the importance of the high lights in the painting. All strong, definite colors are to be avoided, as attracting attention to themselves instead of serving as a set-off to what they surround. Grayish green, écru, cream, and pale gray give the best effects, and are appropriate for all pictures having a light background or one of medium tone. Those having a dark background look better in a gold mat.

Mats covered with silk, or other fabric, are to be avoided as incongruous and inartistic ; and mats suggesting a continuation of the picture to which they belong are also undesirable. A mat should make no pretence to being a work of art in itself, for its purpose is simply to isolate the work of art it surrounds, and heighten the general effect of the picture.

The frames chosen for water color paintings should always be inconspicuous. The frame for a large picture must be correspondingly heavy, to

preserve its strength and proper proportion, but for pictures of medium and small size, the narrower the frame the better. With a gold mat, a gold or oak frame is usually employed, but with light mats, white or cream enamel is preferable.

Many volumes would be necessary for adequately dealing with the subject of Water Color Painting in all its branches. This little book makes no pretence of being exhaustive. If the inexperienced student gains from it such elementary knowledge as will help him to overcome the difficulties which beset a beginner's path, its purpose will be completely fulfilled.

GLOSSARY

Chromatic: Relating to color or to colors. Chromatic order or succession, the order or succession in which colors appear in the rainbow.

Foreshorten: To represent, on a plane surface, any object as if it extended toward the spectator. To shorten by drawing in perspective. Foreshortening, the representation in a foreshortened way.

Juxtaposition: A placing, or being placed, in nearness or contiguity, or side by side.

Local Color: The color which belongs to an object, and is not caused by accidental influences, as of reflection, shadow, etc.

Modeling: The expression or indication, on a plane surface, of solid form, usually by means of light and shade.

Monochrome: A picture or drawing in a single color; a picture made with a single color.

Perspective: The art and the science of so delineating objects that they shall seem to grow smaller as they recede from the eye. The effect of distance upon the appearance of objects, by means of which the eye recognizes them as being at a more or less measurable distance.

Polychrome: As distinguished from monochrome, the art of painting with many colors instead of one.

Technique: The method of performance in any art; technical skill; artistic execution.

Value: In an artistic composition, the character of any part in its relation to other parts, and to the whole; its importance in the composition taken as a whole.

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VERMILION.

VIRIDIAN.

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PERMT VIOLET.

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